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EXHIBITA

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IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

CRYOVAC, INC.,)
)
Plaintiff/Counter-Defendant.) Civil Action No. 04-1278
)
vs.) Hon. Kent A. Jordan
)
PECHINEY PLASTIC PACKAGING,)
INC.,)
)
Defendant/Counter-Plaintiff.)

**PECHINEY PLASTIC PACKAGING INC.'S RESPONSE TO CRYOVAC'S FIRST SET
OF INTERROGATORIES (NOS. 1-8) TO PECHINEY**

Pursuant to Rules 26 and 33 of the Federal Rules of Civil Procedure, defendant/counter-plaintiff Pechiney Plastic Packaging, Inc. ("Pechiney") responds as follows to plaintiff/counter-defendant Cryovac, Inc's ("Cryovac") First Set of Interrogatories (Nos. 1-8) to Pechiney, served on December 15, 2004.

These responses are made solely for the purpose of this action. Each response is subject to all objections as to competence, relevance, materiality, propriety and admissibility, and to any and all other objections on any grounds that would require the exclusion of any statements contained herein if such interrogatory were asked of, or statements contained herein were made by, a witness present and testifying in court, all of which objections and grounds are expressly reserved and may be interposed at the time of trial.

The following responses are based upon information and writings presently available to and located by Pechiney and its attorneys. Pechiney has not completed its investigation of the facts relating to this case, discovery in this action, or its preparation for trial. The answers given herein to the interrogatories are without prejudice to Pechiney's right to produce evidence of any additional facts.

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Pechiney's responses shall not be deemed to constitute admissions that any statement or characterization in an interrogatory is accurate or complete. No incidental or implied admissions are intended by the responses herein. The fact that Pechiney has answered or objected to any interrogatory should not be taken as an admission that Pechiney accepts or admits the existence of any "facts" set forth or assumed by such interrogatory. The fact that Pechiney has answered part or all of any interrogatory is not intended to be, and shall not be construed to be, a waiver by Pechiney of any part of any objection to the interrogatory.

GENERAL OBJECTIONS

Pechiney makes the following general objections whether or not separately set forth in response to each interrogatory and each and every instruction and definition by Cryovac:

1. Pechiney objects to the "Definitions of Terms" and "Instructions" contained in the interrogatories and to each and every interrogatory to the extent that they purport to impose any requirement or discovery obligations on Pechiney other than those set forth in the Federal Rules of Civil Procedure and the Local Rules of the United States District Court for the District of Delaware.

2. Pechiney objects to Definition No. 1 on the ground that the definition of "Pechiney" is overbroad and unduly burdensome. Pechiney further objects to Definition No. 1 on the ground that the phrase "any other persons in control of or under the control of" is vague and ambiguous. In responding to these interrogatories, Pechiney will interpret "Pechiney" to mean Pechiney Plastic Packaging, Inc.

3. Pechiney objects to Definition No. 7 on the grounds that the definition is overbroad, vague and ambiguous. Pechiney will construe "Accused Product(s)" to mean products sold under the trademark ClearShield™.

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4. To the extent that Cryovac's interrogatories seek information reflecting attorney-client communications and/or information protected by the work product doctrine, or any other doctrine protecting such information from disclosure, each such interrogatory is overbroad and seeks information that is beyond the scope of discovery permitted under the Federal Rules of Civil Procedure. Pechiney will not divulge information that is protected from discovery by the attorney-client privilege or the attorney work product doctrine.

5. Pechiney objects to the interrogatories to the extent that they call for information not reasonably available to, or not within the possession, custody, or control of Pechiney. The responses herein are based on information reasonably available to Pechiney and documents within Pechiney's possession, custody, or control, including Pechiney's knowledge of the same.

6. Pechiney objects to each and every interrogatory to the extent that it calls for responses containing confidential business information, trade secrets, or commercially sensitive information of Pechiney. To the extent that Pechiney's responses to these interrogatories are designated as "Confidential Subject to Protective Order" those responses are to be treated in accordance with the terms of the Joint Stipulated Protective Order Pursuant to Rule 26(c) filed with the Court on January 4, 2005.

RESPONSES TO INTERROGATORIES

Pechiney expressly incorporates the above General Objections as though set forth fully in response to each of the following individual interrogatories, and, to the extent that those objections are not raised in any particular response, Pechiney does not waive them. An answer to an interrogatory shall not be deemed a waiver of any applicable specific or General Objection to an interrogatory.

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INTERROGATORY NO. 1

Identify and fully describe each commercial, experimental, or developmental coextruded multiple layer oriented film product that Pechiney has, at any time, made, used, offered for sale, or sold in the United States, imported into the United States, or made in the United States and exported, that contained an oriented coextruded film having at least seven layers, including the food packaging bags sold under the trade name "ClearShield," including but not limited to identifying the trade name of the product, all Pechiney codes or designations corresponding to the product, the ingredients present in each layer of the product (including the trade name, experimental name if not yet commercial, chemical name, supplier, all Pechiney and manufacturer codes or designations, and amounts of the ingredients, stated separately for each layer), the person(s) most knowledgeable about the information requested in this interrogatory, and documents and things sufficient to confirm the accuracy of the information provided by Pechiney in response to this interrogatory.

RESPONSE TO INTERROGATORY NO. 1

Subject to and without waiving the General Objections and pursuant to Rule 33(d) of the Federal Rules of Civil Procedure, Pechiney will produce documents that provide information responsive to this request. Apart from expert witnesses, whose opinions concerning non-infringement will be disclosed pursuant to the Scheduling Order entered by the Court on December 14, 2004, the persons most knowledgeable about the information requested in this interrogatory are Chad D. Mueller and Michael Douglas.

INTERROGATORY NO. 2

Identify all persons, whether employees or agents of Pechiney or outside parties, who are most knowledgeable about Pechiney's research, development, formulation, testing, manufacture, use, marketing, promotion, sales, offers for sale, importation, exportation, distribution, and financial reporting with respect to any Accused Product, and describe the pertinent knowledge of each such person and their position or other association with Pechiney.

RESPONSE TO INTERROGATORY NO. 2

Subject to and without waiving the General Objections, the Pechiney employee most knowledgeable about the subjects identified in Interrogatory No. 2 are:

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1. ClearShield™ Research, Development, Formulation: Chad D. Mueller (Director, Materials Research & Characterization), Michael Douglas (Research Associate, Product Development Flexible Packaging)

2. ClearShield™ Testing, Manufacture, Use: Michael Douglas, Rusty Bright (Technical Manager), and Luis Bogran (Plant Manager).

3. ClearShield™ Marketing, Promotion, Sales, Offers for Sale, Importation, Exportation, Distribution: Frank Kitchel (Director, Marketing), and Tom Grabowski (Director, Sales).

4. ClearShield™ Financial Reporting: Martin Dominique (Director, Finance).

For other Pechiney employees knowledgeable about these subjects, Pechiney hereby incorporates by reference Pechiney Plastic Packaging, Inc.'s Initial Disclosures Pursuant to Fed. R. Civ. P. 26(a)(1) served on Cryovac on December 20, 2004.

INTERROGATORY NO. 3

For each Accused Product, identify and fully describe, on a quarterly basis for each quarter since the introduction of the product: the price(s) charged by Pechiney for the Accused Product, the total number of units and date range(s) the Accused Product was made, used, offered for sale, or sold in the United States, imported into the United States, or made in the United States and exported, the total revenue, incremental profit, gross profit, operating profit, and net income for the Accused Product as reported by or for Pechiney under US GAAP standards, the method(s) used by or for Pechiney to calculate those figures, the person(s) most knowledgeable about the information requested in this interrogatory, and documents and things sufficient to confirm the accuracy of the information provided by Pechiney in response to this interrogatory.

RESPONSE TO INTERROGATORY NO. 3

Subject to and without waiving the General Objections and pursuant to Rule 33(d) of the Federal Rules of Civil Procedure, Pechiney will produce documents that provide information responsive to this request. The persons most knowledgeable about the information requested in this interrogatory are Frank Kitchel and Martin Dominique.

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INTERROGATORY NO. 4

For each contract either executed or negotiated for the sale of the Accused Product since the introduction of the Accused Product, identify and fully describe: the price(s) offered or charged by Pechiney for the Accused Product, the total number of units and date range(s) the Accused Product was projected to be or was actually made, used, offered for sale, or sold in the United States, imported into the United States, or made in the United States and exported, the total revenue or projected revenue, incremental profit or projected incremental profit, gross profit or projected gross profit, operating profit or projected operating profit, and net income or projected net income for the Accused Product as reported by or for Pechiney under US GAAP standards, the method(s) used by or for Pechiney to calculate those figures, the person(s) most knowledgeable about the information requested in this interrogatory, and documents and things sufficient to confirm the accuracy of the information provided by Pechiney in response to this interrogatory.

RESPONSE TO INTERROGATORY NO. 4

Subject to and without waiving the General Objections and pursuant to Rule 33(d) of the Federal Rules of Civil Procedure, Pechiney will produce documents that provide information responsive to this request. The persons most knowledgeable about the information requested in this interrogatory are Frank Kitchel and Martin Dominique.

INTERROGATORY NO. 5

For each Accused Product, state the basis for Pechiney's contentions in Paragraph 11 of its Counterclaims that Pechiney has not infringed, contributed to the infringement of, or induced infringement of, and is not infringing, contributing to the infringement of, or inducing the infringement of claim 11 of the '419 patent, either literally or under the doctrine of equivalents, including but not limited to identifying the specific claim limitation(s) that Pechiney contends is/are not met by the Accused Product and why Pechiney contends those claim limitation(s) are not met, the person(s) most knowledgeable about the basis for Pechiney's contentions in Paragraph 11 of its Counterclaim, and all evidence, documents, or things relating to Pechiney's contentions in Paragraph 11 of its Counterclaim.

RESPONSE TO INTERROGATORY NO. 5

Pechiney objects to this contention interrogatory on grounds that it is premature. Pechiney has not received any discovery from Cryovac or Cryovac's construction of the claim elements of claim 11 of the '419 patent, and the Court has not yet resolved any potential claim construction disputes. The contentions contained in Paragraph 11 of Pechiney's Counterclaims

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are based on information presently known to Pechiney, and Pechiney's investigation concerning non-infringement in this case continues. Subject to and without waiving these objections or the General Objections, the basis for Pechiney's contentions in Paragraph 11 of its Counterclaims that Pechiney has not infringed, contributed to the infringement of, or induced infringement of, and is not infringing, contributing to the infringement of, or inducing the infringement of claim 11 of the '419 patent, either literally or under the doctrine of equivalents is that the Accused Products do not meet at least the claim limitation of claim 11 requiring that the oriented coextruded film having seven layers be "arranged symmetrically."

Pechiney further objects to identifying the person(s) most knowledgeable about the basis for Pechiney's non-infringement contentions on attorney-client privilege and attorney work product grounds. A non-infringement determination on the '419 patent will be made on the paper record, especially the Court's claim construction, with the potential assistance of experts in the field of coextruded multi-layer oriented film structures. Pechiney will disclose expert testimony on issues for which it has the burden of proof on or before May 19, 2005 as per the Court's December 14, 2004 Scheduling Order.

INTERROGATORY NO. 6

Identify all opinions of counsel that were prepared by or for Pechiney relating to the '419 patent, and whether, and if so, why, Pechiney contends it reasonably relied upon those opinions of counsel.

RESPONSE TO INTERROGATORY NO. 6

Pechiney objects to this interrogatory on the grounds that the information its seeks is not relevant to the subject matter of this action or reasonably likely to lead to the discovery of admissible evidence. Specifically, Cryovac did not allege in its Complaint that Pechiney's purported infringement of the '419 patent was willful, so opinions of counsel are irrelevant to this case as presently framed by Cryovac.

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INTERROGATORY NO. 7

With respect to claim 11 of the '419 patent, state the basis for Pechiney's contentions in Paragraph 17 of its Counterclaim that the claim is invalid under 35 U.S.C. § 101 et seq., and identify and fully describe all prior art, evidence, documents, or things relating to Pechiney's patent invalidity contentions and the person(s) most knowledgeable about the basis for Pechiney's contentions.

RESPONSE TO INTERROGATORY NO. 7

Pechiney objects to this contention interrogatory on grounds that it is premature. Pechiney has not received any discovery from Cryovac or Cryovac's construction of the claim elements of claim 11 of the '419 patent, and the Court has not yet resolved any potential claim construction disputes. Pechiney's invalidity contentions are based on prior art references presently identified by Pechiney. However, Pechiney's search for relevant prior art continues. Therefore, Pechiney reserves the right to amend or supplement its contentions that claim 11 of the '419 patent is invalid.

Pechiney further objects to identifying the person(s) most knowledgeable about the basis for Pechiney's invalidity contentions on attorney-client privilege and attorney work product grounds. An invalidity determination on the '419 patent will be made on the paper record with the potential assistance of experts in the field of coextruded multi-layer oriented film structures. Pechiney will disclose expert testimony on issues for which it has the burden of proof on or before May 19, 2005 as per the Court's December 14, 2004 Scheduling Order.

Subject to and without waiving these objections and the General Objections, Pechiney believes that the person(s) with the most knowledge on the invalidity of the '419 patent include heretofore unspecified persons at Cryovac including, but not limited to, the named inventor on the '419 patent and the attorney(s) who prosecuted the '419 patent. Pechiney contends that claim 11 of the '419 patent is anticipated by at least one or more the following prior art references and is rendered obvious by at least one or more combinations of the following prior art references:

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U.S. Patent No. 3,740,306	U.S. Patent No. 4,608,286
U.S. Patent No. 3,840,427	U.S. Patent No. 4,612,221
U.S. Patent No. 3,871,947	U.S. Patent No. 4,617,240
U.S. Patent No. 3,900,635	U.S. Patent No. 4,619,859
U.S. Patent No. 3,944,699	U.S. Patent No. 4,629,596
U.S. Patent No. 4,058,647	U.S. Patent No. 4,640,852
U.S. Patent No. 4,162,343	U.S. Patent No. 4,649,004
U.S. Patent No. 4,229,241	U.S. Patent No. 4,652,325
U.S. Patent No. 4,254,169	U.S. Patent No. 4,708,896
U.S. Patent No. 4,284,672	U.S. Patent No. 4,720,420
U.S. Patent No. 4,347,322	U.S. Patent No. 4,732,795
U.S. Patent No. 4,348,437	U.S. Patent No. 4,746,562
U.S. Patent No. 4,352,850	U.S. Patent No. 4,764,404
U.S. Patent No. 4,357,376	U.S. Patent No. 5,005,355
U.S. Patent No. 4,357,383	U.S. Patent No. 4,182,457
U.S. Patent No. 4,361,628	U.S. Patent No. 4,284,674
U.S. Patent No. 4,390,587	U.S. Patent No. 4,355,721
U.S. Patent No. 4,399,181	U.S. Patent No. 4,398,635
U.S. Patent No. 4,412,025	U.S. Patent No. 4,400,428
U.S. Patent No. 4,430,377	U.S. Patent No. 4,405,667
U.S. Patent No. 4,430,378	U.S. Patent No. 4,407,873
U.S. Patent No. 4,440,824	U.S. Patent No. 4,421,823
U.S. Patent No. 4,442,147	U.S. Patent No. 4,457,960
U.S. Patent No. 4,469,752	U.S. Patent No. 4,464,443
U.S. Patent No. 4,469,753	U.S. Patent No. 4,495,249
U.S. Patent No. 4,491,598	U.S. Patent No. 4,501,797
U.S. Patent No. 4,501,634	U.S. Patent No. 4,501,798
U.S. Patent No. 4,501,779	U.S. Patent No. 4,514,465
U.S. Patent No. 4,511,610	U.S. Patent No. 4,514,465
U.S. Patent No. 4,522,775	U.S. Patent No. 4,532,189
U.S. Patent No. 4,525,414	U.S. Patent No. 4,557,780
U.S. Patent No. 4,533,510	U.S. Patent No. 4,561,920
U.S. Patent No. 4,533,576	U.S. Patent No. 4,588,648
U.S. Patent No. 4,542,075	European Publication No. EP 0 063 006 A1
U.S. Patent No. 4,551,365	European Publication No. EP 0 118 060 A1
U.S. Patent No. 4,552,714	German Publication No. DE 3306189 A1
U.S. Patent No. 4,552,801	U.K. Publication No. GB 2 081 723 A
U.S. Patent No. 4,559,266	Japanese Publication No. 55-81576
U.S. Patent No. 4,565,738	Japanese Publication No. 60-27000
U.S. Patent No. 4,572,854	European Publication No. EP 0 149 321 A1
U.S. Patent No. 4,578,294	U.K. Publication No. GB 2 139 948
Alfrey, Jr., T., "Multilayer Thermoplastics Sheets and Films" in Burke, J.J., Weiss, V. <i>Block and Graft Copolymers</i> (1973).	
Barich, G. "Konstruktionsvorschlage fur Coextrusionswerkzeuge" in <i>Kunststoffberater</i> (June 1984).	
Bertrand, K. "New high-barrier materials wrap the food market" in <i>Packaging</i> (Sept. 1984).	

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- Blackwell, A. L., "Ethylene Vinyl Alcohol Resins as a Barrier Material in Multi-Layer Packages" in *Journal of Plastic Film & Sheeting* (July 1985).
- Browning, J.M. "The Techniques of Coextrusion to meet the Changing Market" in *Paper Technology and Industry* (Oct. 1984).
- Clarke, P.J. "Multilayer Coextrusion" in *Polymer Extrusion III* (Sept. 1985).
- "Coextruded Packaging Excitement Spurs Machinery, Materials Advances" in *Plastics Technology* (Dec. 1985)
- "Coextrusion: Les Raisons Du Succès" in *Plastiques Modernes et Elastomères* (May 1982).
- "Coextrusion Comes of Age" (June 15-17, 1981).
- Crandell, R.L., "Coextrudable Adhesive Resins" in Notes of the Technical Association of the Pulp and Paper Industry's 1983 Coextrusion Seminar (May 23-26, 1983).
- Dagleish, D.T. "Coextruded high barrier films" in *Plastics & Rubber International* (Feb. 1985)
- "Die design for coextruded film" in *Plastics & Rubber International* (Feb. 1985).
- Djordjevic, Dragan, "Coextrusion Cast Film" in Proceedings of the Technical Association of the Pulp and Paper Industry, *Polymers, Laminations and Coatings Conference* (Sept. 1984).
- Halter, H. and Caspar, G. "Multi-layer Blown Film Extrusion" in *Industrial & production Engineering* Vol. 8 (Jan. 1984).
- Han, C.D., Shetty, R., "Studies on Multilayer Film Coextrusion I. Rheology of Flat-Film Coextrusion" in *Society of Plastics Engineers 31st Annual Technical Conference* (April 26-29, 1976).
- Han, C.D., Shetty, R., "Studies on Multilayer Film Coextrusion II. Rheology of Blown Film Coextrusion" in *Society of Plastics Engineers 31st Annual Technical Conference* (April 26-29, 1976).
- Hensen, Prof. Dr.-Ing. F., Hessenbruch, Dr.-Ing. R, Bongaerts, Dipl.-Ing. H., "State of Development in the Coextrusion of Multi-Layer Blown and Cast Film" translated from *Kunststoffe 71* (Sept. 1981).
- Hessenbruch, R., "Improvements in Blown-Film Coextrusion" in *Modern Plastics* (Feb. 1978).
- Hessenbruch, R., "Recent Development in Blown Film Coextrusion" in Proceedings of the Technical Association of the Pulp and Paper Industry, *Polymers, Laminations and Coatings Conference* (Sept. 1984).
- Hind, V. and Weiss, M. "Coextrusion widens the market for blown bottles" in *British Plastics & Rubber* (Jan. 1985).
- Fischer, P., Wortberg, J., "Design and lay-out of co-extrusion blown film plants" in *Kunststoffe German Plastics* (Jan. 1984).
- Kirkland, C. "Barrier Coextrusion in Packaging: Getting a Grip on New Technologies" in *Plastics Technology* (Feb. 1983).
- McCaull, J.P. "Biaxially Oriented Barrier Coextrusions" in Proceedings of the Technical Association of the Pulp and Paper Industry, *Polymers, Laminations and Coatings Conference* (Sept. 1984).
- Miller, D.C. "State-of-the-Art in Laboratory Film Extrusion Equipment and Applications" in *1985 Film Extrusion Short Course* (1985).
- "More New Blown Film Technology for HDPE, LLDPE, Coextrusion and Bags" in *Plastics Technology* (Feb. 1985).
- Murakami, K., "Progresses of Coextrusion Techniques" in *Japan Plastics Age* (Nov.-Dec. 1975).
- "News in Extrusion" in *Plastics Technology* (May 1985).

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- Prall, G.M. "A multipurpose blown-film line for single- and multilayer films" in *Tappi Journal* (Feb. 1985).
- Schnell, J.E., "Co-extrusion—A Simplified Approach to Selecting the Proper Die Assembly in Blown-Film Extrusion" in *Proceedings of the Technical Association of the Pulp and Paper Industry 1983 Paper Synthetics Conference* (Sept. 26-28, 1983).
- Schrenk, W.J., "Flat Die Coextrusion of Film and Sheet by the Feedblock Method" in *Society of Plastics Engineers 31st Annual Technical Conference* (May 7-10, 1973).
- Schrenk, W.J., "Multilayer Polymer Flow in Flat Die Coextrusion" in *Pactec V Plastics Technology Advances 1980 Update* (1980).
- Schrenk, W.J. and Marcus, S.A. "New Developments in Coextruded High Barrier Plastic Food Packaging" in Proceedings of the Technical Association of the Pulp and Paper Industry, *Polymers, Laminations and Coatings Conference* (Sept. 1984).
- Shteevy, R., "Layer Distribution in Coextrusion" in *Antec '82 The 40th Annual Technical Conference and Exhibition of the Society of Plastics Engineers* (May 10-13, 1982).
- Skribiski, R.P., Rossetti, Jr., L.F., "New Heat Shrinkable Products Combine Coextrusion and Electron Beam Irradiation Techniques" in *Antec '82 The 40th Annual Technical Conference and Exhibition of the Society of Plastics Engineers* (May 10-13, 1982).
- "Squeezing More Properties into Co-extruded Structures" in *Package Engineering* (March 1982).
- "Technology News" *Plastics Technology* (Dec. 1983)
- "Technology News" *Plastics Technology* (Sept. 1983)
- "Technology News" *Plastics Technology* (Feb. 1984)
- Veazey, E.W., "Linear Low Density Polyethylene in Coextruded Film Applications" in Notes of the Technical Association of the Pulp and Paper Industry's 1983 Coextrusion Seminar (May 23-26, 1983).
- Whittington, L.R., *Whittington's Dictionary of Plastics* (1968).
- Wright, W. "Straight Talk on Five-Layer Blown Film Dies" in *Plastics Technology* (Feb. 1984).
- Wordingham, J.A., Reboul, P., *Dictionary of Plastics* (1967).
- Wortberg, J. "Blown film extrusion - coextrusion and automation" in *Kunstoffe German Plastics* (Sept. 1985).

I. CLAIM 11 OF THE '419 PATENT IS INVALID AS ANTICIPATED UNDER 35 U.S.C. § 102.

In particular, Pechiney contends that claim 11 of the '419 patent is anticipated by at least the following prior references.

A. Claim 11 of the '419 patent is anticipated by U.S. Patent No 5,055,355.

U.S. Patent No. 5,005,355 ("the '355 patent") was filed by DeAntonis et al. on October 7, 1988 and issued on October 8, 1991. The application resulting in the issuance of the '355 patent is a continuation of serial no. 727,205, filed on April 29, 1985, which is a continuation of serial

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no. 518,983, filed on August 1, 1983. The '355 patent was not cited during the prosecution of the application resulting in the issuance of the '419 patent. The '355 patent discloses each and every claim element of claim 11 of the '419 patent as shown by the following claim chart:

Claim Elements of Claim 11		Disclosure of the '355 Patent
11a	11. An oriented	"Preferably the film laminate is oriented to a draw ratio of from 1.5:1 to 4:1 in at least one direction. Preferred orientations include monoaxially oriented film laminates and biaxially oriented film laminates." ('355 patent, col. 4, ll. 10-14.)
11b	coextruded film	"The preferred film laminate is formed by coextrusion." ('355 patent, col. 2, ll. 13-14.)
11c	having at least seven layers	"In addition to having at least one layer of polyamide adjacent to at least one layer of ethylene vinyl alcohol copolymer the film laminate of the present invention can include laminates and other polymeric film layers. Included in the other polymer film layers are polyolefins and polyolefin copolymers including ionic copolymers. Adhesive layers include modified polyolefins." ('355 patent, col. 3, ll. 46-51.)
11d	arranged symmetrically comprising:	"Structures which are particularly preferred are balanced or symmetrical structures to prevent curling of the film." ('355 patent, col. 2, ll. 19-21.)
11e	(a) a core layer comprising an ethylene vinyl alcohol copolymer;	"Such structures include at least one core layer of ethylene vinyl alcohol copolymer sandwiched between outer layers of polyamide." ('355 patent, col. 2, ll. 21-23.)
11f	(b) two intermediate layers each comprising a polyamide;	"Such structures include at least one core layer of ethylene vinyl alcohol copolymer sandwiched between outer layers of polyamide." ('355 patent, col. 2, ll. 21-23.)
11g	(c) two outer layers each comprising a polymeric material or blend of polymeric materials; and	"In addition to having at least one layer of polyamide adjacent to at least one layer of ethylene vinyl alcohol copolymer the film laminate of the present invention can include laminates and other polymeric film layers. Included in the other polymer film layers are polyolefins and polyolefin copolymers including ionic copolymers." ('355 patent, col. 3, ll. 46-52.)
11h	(d) two layers, each comprising an adhesive polymeric material, which adhere each of said intermediate layers to a respective outer layer.	"In addition to having at least one layer of polyamide adjacent to at least one layer of ethylene vinyl alcohol copolymer the film laminate of the present invention can include laminates and other polymeric film layers. Included in the other polymer film layers are polyolefins and polyolefin copolymers including ionic copolymers. Adhesive layers include modified polyolefins. Non-limiting examples of other polymeric layers and adhesives which can be used in the film laminate of the present invention are disclosed in U.S. Pat. Nos. 4,058,647 and 4,254,169 both hereby incorporated by reference." ('355 patent, col. 3, ll. 46-57.)
		U.S. Patent No. 4,058,647 ("the '647 patent") states "it has been proposed to form a laminated sheet with a polyester, a polyamide, a hydrolyzed EVA, etc. ... It has been proposed to provide an adhesive composition layer between the layers of said resins."

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Claim Elements of Claim 11	Disclosure of the '355 Patent
	('647 Patent, col. 1, ll. 33-45.)

The '355 patent discloses each and every claim element of claim 11 of the '419 patent. The application to which the '355 patent claims priority was filed by another at least one year prior to the filing date of the '419 patent. Therefore, the '355 patent invalidates claim 11 of the '419 patent under 35 U.S.C. § 102(e).

B. Claim 11 of the '419 patent is anticipated by the Blackwell article.

The article entitled "Ethylene Vinyl Alcohol Resins as a Barrier Material in Multi-Layer Packages" by A. L. Blackwell ("the Blackwell article") was published in Journal of Plastic Film & Sheeting, Vol. 1 on July 1985. The Blackwell article is based on a talk presented at the SPI National Plastics Exposition Conference in Chicago on July 18, 1985. The Blackwell article was not cited during the prosecution of the application resulting in the issuance of the '419 patent. The Blackwell article discloses each and every claim element of claim 11 of the '419 patent as shown by the following claim chart:

Claim Elements of Claim 11	Disclosure of the Blackwell Article
11a 11. An oriented	"Coextrusion and orientation have combined with these high barrier resins to make many new markets available to plastics packaging." (Blackwell article, ABSTRACT, p. 205.) "As is typical of other oriented films, the biaxially oriented EVOH film has much better barrier properties over the full range of humidities." (Blackwell article, PROPERTIES OF EVOH COPOLYMERS, p. 209.)
11b coextruded film	"Coextrusion and orientation have combined with these high barrier resins to make many new markets available to plastics packaging." (Blackwell article, ABSTRACT, p. 205.) "EVOH resins, available in pellet form, are processed by coextrusion into multilayer film ..." (Blackwell article, FABRICATED PRODUCTS, p. 209.)
11c having at least seven layers	"Although the most popular structure is five layers thick, there are some 6 and 7 layer structures." (Blackwell article, FABRICATED PRODUCTS, p. 210.)
11d arranged symmetrically comprising:	"In balanced structures, there are two equal thicknesses of adhesive layers and two equal thicknesses of the primary resin layers." (Blackwell article, FABRICATED PRODUCTS, p. 211.)
11e (a) a core layer comprising an ethylene vinyl alcohol copolymer;	"Because of the moisture sensitivity of the EVOH resins, they are usually placed in the interior of the multilayer composite structure so that adequate moisture protection is achieved." (Blackwell

Claim Elements of Claim 11		Disclosure of the Blackwell Article
11f	(b) two intermediate layers each comprising a polyamide;	article, FABRICATED PRODUCTS, p. 209.) “In addition to the EVOH layer, other polymers used include LLDPE, HDLPE, HDPE, PP, OPP, ethylene vinyl acetates (EVA), ionomer resin, acrylates, nylon, polystyrene and polycarbonate. There is generally no need for an adhesive layer when nylon is coextruded with EVOH resins ...” (Blackwell article, FABRICATED PRODUCTS, p. 210.)
11g	(c) two outer layers each comprising a polymeric material or blend of polymeric materials; and	“Typically, the EVOH layer is coextruded between layers of high moisture barrier materials such as PE and polypropylene (PP).” (Blackwell article, FABRICATED PRODUCTS, p. 209.)
11h	(d) two layers, each comprising an adhesive polymeric material, which adhere each of said intermediate layers to a respective outer layer.	“Since the highly polar EVOH resins do not adhere well to non-polar polyolefins, an adhesive layer must be used between these two polymers.” (Blackwell article, FABRICATED PRODUCTS, p. 210.)

The Blackwell article discloses each and every claim element of claim 11 of the ‘419 patent. The Blackwell article was published prior to the filing date of the ‘419 patent. Therefore, the Blackwell article invalidates claim 11 of the ‘419 patent under 35 U.S.C. § 102(a).

C. Claim 11 of the ‘419 patent is anticipated by the Hessenbruch article.

The article entitled “Recent Development in Blown Film Coextrusion” by Rolf Hessenbruch (“the Hessenbruch article”) was presented at the 1984 Polymers, Laminations and Coatings Conference on September 24-26, 1984. The Hessenbruch article was not cited during the prosecution of the application resulting in the issuance of the ‘419 patent. The Hessenbruch article discloses each and every claim element of claim 11 of the ‘419 patent as shown by the following claim chart:

Claim Elements of Claim 11		Disclosure of the Hessenbruch Article
11a	11. An oriented	“Blowing proportion.” (Hessenbruch article, p. 92, Table 4.)
11b	coextruded film	“Today the technology of coextrusion enables the production of high sophisticated films in one step by utilizing the best properties of the raw materials in a multi-layer film.” (Hessenbruch article, p. 85.)
11c	having at least seven layers	“Summarizing the main features of a modern coextrusion blown film line, the significant items are ... Availability of

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Claim Elements of Claim 11		Disclosure of the Hessenbruch Article
11d	arranged symmetrically comprising:	dies with 2, 3, 4, 5 or 7 layers." (Hessenbruch article, p. 87.)
11e	(a) a core layer comprising an ethylene vinyl alcohol copolymer;	"EVOH has excellent gas barrier properties (about 30-50 times better than nylon). As this material is hygroscopic, the use as centre layer is recommended." (Hessenbruch article, p. 88.)
11f	(b) two intermediate layers each comprising a polyamide;	"EVOH has insufficient mechanical properties, which must be compensated by combining it with materials with high mechanical strength." (Hessenbruch article, p. 88.) "It has to be mentioned that the mechanical strength of nylon film is higher, and only partly compensated by the thicker LDPE layer in the EVOH combination." (Hessenbruch article, p. 89.)
11g	(c) two outer layers each comprising a polymeric material or blend of polymeric materials; and	"These materials are divided in Supporting materials[,] bonding materials and barrier materials. The <u>supporting materials</u> and their characteristics[:] LDPE is still the most common material, because it is transparent, easily processable, sealable, humidity resistant and not too expensive." (Hessenbruch article, p. 87.)
11h	(d) two layers, each comprising an adhesive polymeric material, which adhere each of said intermediate layers to a respective outer layer.	"Ionomers were the first bonding materials in connection with nylon and LDPE." (Hessenbruch article, p. 87.)

The Hessenbruch article discloses each and every claim element of claim 11 of the '419 patent. The Hessenbruch article was presented and published at least one year prior to the filing date of the '419 patent. Therefore, the Hessenbruch article invalidates claim 11 of the '419 patent under 35 U.S.C. § 102(b).

II. CLAIM 11 OF THE '419 PATENT IS INVALID AS RENDERED OBVIOUS UNDER 35 U.S.C. § 103.

In particular, to the extent the Court does not find a particular prior art reference to anticipate Claim 11 of the '419 patent, Pechiney contends that claim 11 of the '419 patent is rendered obvious by the disclosure of the '355 patent, the Blackwell article and the Hessenbruch

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alone or in combination with the state of the art and is also rendered obvious by at least the following combinations of prior art references.

A. Claim 11 of the '419 patent is obvious in view of the combination of U.S. Patent No. 4,511,610 and U.S. Patent No. 4,746,562.

U.S. Patent No. 4,511,610 ("the '610 patent") was filed by Yazaki et al. on September 29, 1983 and issued on April 16, 1985. The '610 patent was not cited during the prosecution of the application resulting in the issuance of the '419 patent. U.S. Patent No. 4,746,562 ("the '562 patent") was filed on February 28, 1986 by Fant and issued on March 24, 1988. The '562 patent is not listed on the cover page of the '419 patent as one of the "References Cited" and there is no indication in the file history of the '419 patent that the Examiner ever considered the '562 patent. The '610 patent states "[i]n the present invention, in order to improve the rigidity, mechanical strength and transparency of the vessel, it is important that the olefin resin layer should be oriented by drawing." ('610 patent, col. 7, ll. 49-52.) The '562 patent states "[t]he polyamide of the intermediate layers 12 and 14 adds strength to the resulting multilayer film structure." ('562 patent, col. 4, ll. 24-26.) Since the '562 patent states that polyamide adds strength to the resulting structure, a person of ordinary skill in the art would have been motivated to use layers of polyamide in a multilayer film structure where added strength was desired. With the '610 patent stating the importance of mechanical strength for the resulting structure, it would have been obvious to a person of ordinary skill in the art to replace the intermediate layers of the '610 patent with the intermediate layers of nylon disclosed in the '562 patent. The combination of the '610 patent and the '562 patent discloses each and every claim element of claim 11 of the '419 patent as shown by the following claim chart:

Claim Elements of Claim 11		Disclosure of the '610 Patent	Disclosure of the '562 Patent
11a	11. An oriented	"In order to reduce the thickness of the vessel wall as much as possible,	

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Claim Elements of Claim 11		Disclosure of the '610 Patent	Disclosure of the '562 Patent
		improve the rigidity, impact resistance and other mechanical properties of the vessel wall and also improve the transparency and gas barrier property, it is preferred that this multi-layer plastic material be molecularly oriented in at least one direction." ('610 patent, col. 1, ll. 24-29.)	
11b	coextruded film	"According to the present invention, a parison or sheet having the above-mentioned multi-layer structure is formed by co-melt extrusion ..." ('610 patent, col. 7, ll. 31-33.)	"The materials are coextruded ..." ('562 patent, col. 5, l. 15.)
11c	having at least seven layers	"Seven-layer structures of (B)/(B+A+C)/(C)/(A)/(C)/(B+A+C)/(B) and (B)/(B')/(C)/(A)/(C)/(B')/(B)." ('610 patent, col. 7, ll. 23-25.)	"For the preferred seven layer film ..." ('562 patent, col. 5, ll. 8-9.)
11d	arranged symmetrically comprising:	"Seven-layer structures of (B)/(B+A+C)/(C)/(A)/(C)/(B+A+C)/(B) and (B)/(B')/(C)/(A)/(C)/(B')/(B)." ('610 patent, col. 7, ll. 23-25.)	"The film structure depicted in FIG. 1 is directed to a multilayer film which is preferably palindromic or symmetrical in construction. A film structure is directed to a multilayer film having the generalized structure of A/B/C/D/C/B/A where A is an outer layer, B is an adhesive layer, C is an intermediate layer, and D is a barrier core layer." ('562 patent, col. 3, l. 66 - col. 4, l. 4.)
11e	(a) a core layer comprising an ethylene vinyl alcohol copolymer;	"[O]xygen-barrier layer (A) ..." ('610 patent, col. 7, l. 13.) "In view of the oxygen-barrier property, a copolymer obtained by saponifying an ethylene/vinyl acetate copolymer ... is preferably used as the characteristic properties of the ethylene/vinyl alcohol copolymer in the multi-layer vessel of the present invention." ('610 patent, col. 7, ll. 1-7.)	"Preferably, core layer 10 is an ethylene vinyl alcohol copolymer ..." ('562 patent, col. 4, ll. 12-13.)
11f	(b) two intermediate layers each comprising a polyamide;		"Intermediate layers 12 and 14 are polyamides such as nylon 6." ('562 patent, col. 4, ll. 21-22.)
11g	(c) two outer layers each comprising a polymeric material	"[T]he olefin resin layer (B)." ('610 patent, col. 7, ll. 14.)	"Outer layers 16 and 18 comprise a linear low density polyethylene blended with an

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Claim Elements of Claim 11		Disclosure of the '610 Patent	Disclosure of the '562 Patent
	or blend of polymeric materials; and		anti-blocking agent." ('562 patent, col. 4, ll. 27-28.)
11h	(d) two layers, each comprising an adhesive polymeric material, which adhere each of said intermediate layers to a respective outer layer.	"[T]he adhesive layer (C)." ('610 patent, col. 7, ll. 12.)	"A film structure is directed to a multilayer film having the generalized structure of A/B/C/D/C/B/A where A is an outer layer, B is an adhesive layer, C is an intermediate layer ..." ('562 patent, col. 3, l. 68 - col. 4, l. 3.)

The combination of the '610 patent and the '562 patent discloses each and every claim element of claim 11 of the '419 patent. The application resulting in the '610 patent was filed by another at least one year prior to the filing date of the '419 patent. The application resulting in the '562 patent was filed by another prior to the filing date of the '419 patent. Therefore, the combination of the '610 patent and the '562 patent invalidates claim 11 of the '419 patent under 35 U.S.C. § 103.

B. Claim 11 of the '419 patent is obvious in view of the combination of U.S. Patent No. 4,572,854 and U.S. Patent No. 4,746,562.

U.S. Patent No. 4,572,854 ("the '854 patent") was filed by Dallmann et al. on February 22, 1984 and issued on February 25, 1986. The '854 patent was not cited during the prosecution of the application resulting in the issuance of the '419 patent. U.S. Patent No. 4,746,562 ("the '562 patent") was filed on February 28, 1986 by Fant and issued on March 24, 1988. The '562 patent is not listed on the cover page of the '419 patent as one of the "References Cited" and there is no indication in the file history of the '419 patent that the Examiner ever considered the '562 patent. The '854 patent states "[i]t is therefore an object of the present invention to improve the physical properties of multilayer film laminates" and "[p]olyamides are compatible with ethylene-vinyl alcohol copolymers over the entire miscibility range and therefore are readily worked in." ('854 patent, col. 1, ll. 56-58, col. 4, ll. 38-40.) The '562 patent states "[t]he

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polyamide of the intermediate layers 12 and 14 adds strength to the resulting multilayer film structure." ('562 patent, col. 4, ll. 24-26.) Since the '562 patent states that polyamides add strength to the resulting structure, a person of ordinary skill in the art would have been motivated to use layers of polyamide in a multilayer film structure where added strength was desired. With the '854 patent stating an object of the invention is to improve the physical properties and polyamides are compatible with ethylene-vinyl alcohol copolymers, it would have been obvious to a person of ordinary skill in the art to replace the intermediate layers C of the '854 patent with the intermediate layers of polyamide disclosed in the '562 patent. The combination of the '854 patent and the '562 patent discloses each and every claim element of claim 11 of the '419 patent as shown by the following claim chart:

Claim Elements of Claim 11		Disclosure of the '854 Patent	Disclosure of the '562 Patent
11a	11. An oriented	"The film according to the present invention produced by ... stretching, at least biaxially ..." ('854 patent, col. 6, ll. 48-51.)	
11b	coextruded film	"The film according to the present invention produced by coextruding layers B,C,D,C(B optional), or A,B,C,D,C,(B and A optional) ..." ('854 patent, col. 6, ll. 48-50.)	"The materials are coextruded ..." ('562 patent, col. 5, l. 15.)
11c	having at least seven layers	"The production of a seven-layer film ..." ('854 patent, col. 7, l. 10.)	"For the preferred seven layer film ..." ('562 patent, col. 5, ll. 8-9.)
11d	arranged symmetrically comprising:	"The production of a seven-layer film is appropriately carried out with the use of a three-layer die. In the case of a symmetric film structure, the melts of the polymers for layers B, C, and D may be extruded through the center channel and the melts for the outer sealing layers A simultaneously through the outer channels onto a chill roll." ('854 patent, col. 7, ll. 10-16.) See also Figure 6 illustrating seven layers arranged symmetrically.	"The film structure depicted in FIG. 1 is directed to a multilayer film which is preferably palindromic or symmetrical in construction. A film structure is directed to a multilayer film having the generalized structure of A/B/C/D/C/B/A where A is an outer layer, B is an adhesive layer, C is an intermediate layer, and D is a barrier core layer." ('562 patent, col. 3, l. 66 - col. 4, l. 4.)

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Claim Elements of Claim 11		Disclosure of the '854 Patent	Disclosure of the '562 Patent
11e	(a) a core layer comprising an ethylene vinyl alcohol copolymer;	"The barrier layer D serves as a gas barrier, in particular an oxygen or aroma barrier, and is comprised of an ethylene-vinyl alcohol copolymer ..." ('854 patent, col. 3, ll. 65-67.)	"Preferably, core layer 10 is an ethylene vinyl alcohol copolymer ..." ('562 patent, col. 4, ll. 12-13.)
11f	(b) two intermediate layers each comprising a polyamide;		"Intermediate layers 12 and 14 are polyamides such as nylon 6." ('562 patent, col. 4, ll. 21-22.)
11g	(c) two outer layers each comprising a polymeric material or blend of polymeric materials; and	"[O]uter sealing layers A ..." ('854 patent, col. 7, ll. 14-15.) "A film sealable on both sides, comprising (1) an ethylene-propylene copolymer for layer A ..." ('854 patent, col. 7, ll. 60-61.)	"Outer layers 16 and 18 comprise a linear low density polyethylene blended with an anti-blocking agent." ('562 patent, col. 4, ll. 27-28.)
11h	(d) two layers, each comprising an adhesive polymeric material, which adhere each of said intermediate layers to a respective outer layer.	"B contains adhesion-promoting material ..." ('854 patent, col. 3, ll. 34-35.) See Figure 6 illustrating each layer B situated between corresponding outer sealing layer A and layer C.	"A film structure is directed to a multilayer film having the generalized structure of A/B/C/D/C/B/A where A is an outer layer, B is an adhesive layer, C is an intermediate layer ..." ('562 patent, col. 3, l. 68 - col. 4, l. 3.)

The combination of the '854 patent and the '562 patent discloses each and every claim element of claim 11 of the '419 patent. The application resulting in the '854 patent was filed by another at least one year prior to the filing date of the '419 patent. The application resulting in the '562 patent was filed by another prior to the filing date of the '419 patent. Therefore, the combination of the '854 patent and the '562 patent invalidates claim 11 of the '419 patent under 35 U.S.C. § 103.

C. Claim 11 of the '419 patent is obvious in view of the combination of U.S. Patent No. 4,572,854 and European Patent Application Publication No. 0 063 006.

U.S. Patent No. 4,572,854 ("the '854 patent") was filed by Dallmann et al. on February 22, 1984 and issued on February 25, 1986. The '854 patent was not cited during the prosecution of the application resulting in the issuance of the '419 patent. European Patent Specification

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Publication No. 0 063 006 A1 ("the EP '006 publication") was published on October 20, 1982. The EP '006 publication was published over one year prior to the filing date of the '419 patent. The EP '006 publication was not cited during the prosecution of the application resulting in the issuance of the '419 patent. The '854 patent states "[p]olyamides are compatible with ethylene-vinyl alcohol copolymers over the entire miscibility range and therefore are readily worked in. Such mixtures (blends) have already been described in European Patent Application No. 00 63 006." ('854 patent, col. 4, ll. 38-42.) Since the '854 patent states polyamides are compatible with ethylene-vinyl alcohol copolymers, a person of ordinary skill in the art would have been motivated to use a layer of polyamide with a layer of ethylene-vinyl alcohol in a multilayer film structure. Especially with the '854 patent specially mentioning the EP '006 publication, it would have been obvious to a person of ordinary skill in the art replace the intermediate layers C of the '854 patent with the intermediate layers of polyamide disclosed in the EP '006 publication. The combination of the '854 patent and the EP '006 publication discloses each and every claim element of claim 11 of the '419 patent as shown by the following claim chart:

Claim Elements of Claim 11		Disclosure of the '854 Patent	Disclosure of the EP '006 Publication
11a	11. An oriented	"The film according to the present invention produced by ... stretching, at least biaxially ..." ('854 patent, col. 6, ll. 48-51.)	
11b	coextruded film	"The film according to the present invention produced by coextruding layers B,C,D,C(B optional), or A,B,C,D,C,(B and A optional) ..." ('854 patent, col. 6, ll. 48-50.)	"Also according to the invention, there is provided a process for producing a composite film product of uniform caliper and excellent oxygen barrier properties, characterised by the steps comprising ... continuously forcing the fused composition into a coextrusion die ..." (EP '006 publication, p. 4, ll. 4-18.)
11c	having at least seven layers	"The production of a seven-layer film ..." ('854 patent, col. 7, l. 10.)	

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Claim Elements of Claim 11		Disclosure of the '854 Patent	Disclosure of the EP '006 Publication
11d	arranged symmetrically comprising:	"The production of a seven-layer film is appropriately carried out with the use of a three-layer die. In the case of a symmetric film structure, the melts of the polymers for layers B,C, and D may be extruded through the center channel and the melts for the outer sealing layers A simultaneously through the outer channels onto a chill roll." ('854 patent, col. 7, ll. 10-16.) See also Figure 6 illustrating seven layers arranged symmetrically.	
11e	(a) a core layer comprising an ethylene vinyl alcohol copolymer;	"The barrier layer D serves as a gas barrier, in particular an oxygen or aroma barrier, and is comprised of an ethylene-vinyl alcohol copolymer ..." ('854 patent, col. 3, ll. 65-67.)	"[F]irst layer (of EVOH copolymer blend)." (EP '006 publication, p. 7, ll. 16-17.)
11f	(b) two intermediate layers each comprising a polyamide;		"[T]he second and third layers (comprised of the polyamide resin) will both be in the full surface contact on opposite sides of the first layer (of EVOH copolymer blend)." (EP '006 publication, p. 7, ll. 14-17.)
11g	(c) two outer layers each comprising a polymeric material or blend of polymeric materials; and	"[O]uter sealing layers A ..." ('854 patent, col. 7, ll. 14-15.) "A film sealable on both sides, comprising (1) an ethylene-propylene copolymer for layer A ..." ('854 patent, col. 7, ll. 60-61.)	"[A] fifth layer may be provided adjacent the fourth layer, with the fifth layer being a heat sealing resin (such as ionomer)." (EP '006 publication, p. 7, ll. 23-25.)
11h	(d) two layers, each comprising an adhesive polymeric material, which adhere each of said intermediate layers to a respective outer layer.	"B contains adhesion-promoting material ..." ('854 patent, col. 3, ll. 34-35.) See Figure 6 illustrating each layer B situated between corresponding outer sealing layer A and layer C.	"The structure can comprise a fourth layer. ... [T]he fourth layer comprising an adhesive serving to bond the ionomer to an adjacent layer (such as may be of polyamide resin)." (EP '006 publication, p. 7, l. 22 - p. 8, l. 2.)

The combination of the '854 patent and the EP '006 publication discloses each and every claim element of claim 11 of the '419 patent. The application resulting in the '854 patent was filed by another at least one year prior to the filing date of the '419 patent. The EP '006 publication was published at least one year prior to the filing date of the '419 patent. Therefore,

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the combination of the '854 patent and the EP '006 publication invalidates claim 11 of the '419 patent under 35 U.S.C. § 103.

D. Claim 11 of the '419 patent is obvious in view of the combination of U.S. Patent No. 4,511,610 and Japanese Publication No. 60-27000.

U.S. Patent No. 4,511,610 ("the '610 patent") was filed by Yazaki et al. on September 29, 1983 and issued on April 16, 1985. The '610 patent was not cited during the prosecution of the application resulting in the issuance of the '419 patent. Japanese Publication No. 60-27000 ("the JP '000 publication") was published on August 14, 1985. The JP '000 publication was not cited during the prosecution of the application resulting in the issuance of the '419 patent. The '610 patent states an "object of the present invention is to provide a seamless plastic vessel prepared by draw forming." ('610 patent, col. 2, ll. 32-34.) The English translation of the JP '000 publication ("JP '000 translation") states "[t]he use of a copolymerized nylon dramatically improves deep-draw moldability." (JP '000 translation, Detailed Description, ¶ 3.) Since the JP '000 publication discloses that copolymerized nylon dramatically improves deep-draw moldability, a person of ordinary skill in the art would have been motivated to use layers of polyamide in a multilayer film structure where draw moldability was desired. With the '610 patent stating an object of the invention is to provide a seamless plastic vessel prepared by draw forming, it would have been obvious to a person of ordinary skill in the art to replace the intermediate layers of the '610 patent with the intermediate layers of nylon disclosed in the JP '000 publication. The combination of the '610 patent and the JP '000 publication discloses each and every claim element of claim 11 of the '419 patent as shown by the following claim chart:

Claim Elements of Claim 11		Disclosure of the '610 Patent	Disclosure of the JP '000 Publication
11a	11. An oriented	"In order to reduce the thickness of the vessel wall as much as possible, improve the rigidity, impact resistance	

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Claim Elements of Claim 11		Disclosure of the '610 Patent	Disclosure of the JP '000 Publication
		and other mechanical properties of the vessel wall and also improve the transparency and gas barrier property, it is preferred that this multi-layer plastic material be molecularly oriented in at least one direction." ('610 patent, col. 1, ll. 24-29.)	
11b	coextruded film	"According to the present invention, a parison or sheet having the above-mentioned multi-layer structure is formed by co-melt extrusion ..." ('610 patent, col. 7, ll. 31-33.)	"[I]t is desirable for the composite film according to the present invention to be manufactured by co-extrusion ..." (JP '000 translation, Detailed Description, ¶ 3.)
11c	having at least seven layers	"Seven-layer structures of (B)/(B+A+C)/(C)/(A)/(C)/(B+A+C)/(B) and (B)/(B')/(C)/(A)/(C)/(B')/(B)." ('610 patent, col. 7, ll. 23-25.)	"[C]omprises a successive structure of sealing resin layer 3, polyolefin-based resin adhesion layer 4, a polyamide resin layer 5, an ethylene-vinyl acetate copolymer saponified layer 6, a polyamide resin layer 7, a polyolefin-based resin adhesion layer 8 and a polypropylene resin layer 9." (JP '000 translation, Detailed Description, ¶ 3.)
11d	arranged symmetrically comprising:	"Seven-layer structures of (B)/(B+A+C)/(C)/(A)/(C)/(B+A+C)/(B) and (B)/(B')/(C)/(A)/(C)/(B')/(B)." ('610 patent, col. 7, ll. 23-25.)	
11e	(a) a core layer comprising an ethylene vinyl alcohol copolymer;	"[O]xygen-barrier layer (A) ..." ('610 patent, col. 7, l. 13.) "In view of the oxygen-barrier property, a copolymer obtained by saponifying an ethylene/vinyl acetate copolymer ... is preferably used as the characteristic properties of the ethylene/vinyl alcohol copolymer in the multi-layer vessel of the present invention." ('610 patent, col. 7, ll. 1-7.)	"[A]n ethylene-vinyl acetate copolymer saponified layer 6 ..." (JP '000 translation, Detailed Description, ¶ 3.)
11f	(b) two intermediate layers each comprising a polyamide;		"[A] polyamide resin layer 5 ... a polyamide resin layer 7 ..." (JP '000 translation, Detailed Description, ¶ 3.)
11g	(c) two outer layers each comprising a polymeric material or blend of	"[T]he olefin resin layer (B)." ('610 patent, col. 7, ll. 14.)	"[A] sealing resin layer 3 ... a polypropylene resin layer 9 ... the sealing resin 3 is a layer made of ethylene-vinyl acetate copolymer resin (EVA),

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Claim Elements of Claim 11		Disclosure of the '610 Patent	Disclosure of the JP '000 Publication
	polymeric materials; and		polyethylene resin (PE) or an ionomer resin ..." (JP '000 translation, Detailed Description, ¶ 3.)
11h	(d) two layers, each comprising an adhesive polymeric material, which adhere each of said intermediate layers to a respective outer layer.	"[T]he adhesive layer (C)." ('610 patent, col. 7, ll. 12.)	"[T]he polyolefin-based adhesive resin layers (4 and 8) are a resin that exhibits adhesion to polyamide resin, EVA saponified material or polypropylene resin (PP) and comprise a polyolefin resin such as PP or PE modified with carboxylic acid." (JP '000 translation, Detailed Description, ¶ 3.)

The combination of the '610 patent and the JP '000 publication discloses each and every claim element of claim 11 of the '419 patent. The application resulting in the '610 patent was filed by another at least one year prior to the filing date of the '419 patent. The JP '000 publication was published prior to the filing date of the '419 patent. Therefore, the combination of the '610 patent and the JP '000 publication invalidates claim 11 of the '419 patent under 35 U.S.C. § 103.

E. Claim 11 of the '419 patent is obvious in view of the combination of U.S. Patent No. 4,572,854 and Japanese Publication No. 60-27000.

U.S. Patent No. 4,572,854 ("the '854 patent") was filed by Dallmann et al. on February 22, 1984 and issued on February 25, 1986. The '854 patent was not cited during the prosecution of the application resulting in the issuance of the '419 patent. Japanese Publication No. 60-27000 ("the JP '000 publication") was published on August 14, 1985. The JP '000 publication was not cited during the prosecution of the application resulting in the issuance of the '419 patent. The '854 patent states "[p]olyamides are compatible with ethylene-vinyl alcohol copolymers over the entire miscibility range and therefore are readily worked in." ('854 patent, col. 4, ll. 38-40.) Since the '854 patent states polyamides are compatible with ethylene-vinyl

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alcohol copolymers, a person of ordinary skill in the art would have been motivated to use a layer of polyamide with a layer of ethylene vinyl alcohol. It would have been obvious to a person of ordinary skill in the art to replace the intermediate layers C of the '854 patent with the intermediate layers of polyamide disclosed in the JP '000 publication. The combination of the '854 patent and the JP '000 publication discloses each and every claim element of claim 11 of the '419 patent as shown by the following claim chart:

Claim Elements of Claim 11		Disclosure of the '854 Patent	Disclosure of the JP '000 Publication
11a	11. An oriented	"The film according to the present invention produced by ... stretching, at least biaxially ..." ('854 patent, col. 6, ll. 48-51.)	
11b	coextruded film	"The film according to the present invention produced by coextruding layers B,C,D,C(B optional), or A,B,C,D,C,(B and A optional) ..." ('854 patent, col. 6, ll. 48-50.)	"[I]t is desirable for the composite film according to the present invention to be manufactured by co-extrusion ..." (JP '000 translation, Detailed Description, ¶ 3.)
11c	having at least seven layers	"The production of a seven-layer film ..." ('854 patent, col. 7, l. 10.)	"[C]omprises a successive structure of sealing resin layer 3, polyolefin-based resin adhesion layer 4, a polyamide resin layer 5, an ethylene-vinyl acetate copolymer saponified layer 6, a polyamide resin layer 7, a polyolefin-based resin adhesion layer 8 and a polypropylene resin layer 9." (JP '000 translation, Detailed Description, ¶ 3.)
11d	arranged symmetrically comprising:	"The production of a seven-layer film is appropriately carried out with the use of a three-layer die. In the case of a symmetric film structure, the melts of the polymers for layers B,C, and D may be extruded through the center channel and the melts for the outer sealing layers A simultaneously through the outer channels onto a chill roll." ('854 patent, col. 7, ll. 10-16.) See also Figure 6 illustrating seven layers arranged symmetrically.	
11e	(a) a core layer	"The barrier layer D serves as a gas	"[A]n ethylene-vinyl acetate

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Claim Elements of Claim 11		Disclosure of the '854 Patent	Disclosure of the JP '000 Publication
	comprising an ethylene vinyl alcohol copolymer;	barrier, in particular an oxygen or aroma barrier, and is comprised of an ethylene-vinyl alcohol copolymer ..." ('854 patent, col. 3, ll. 65-67.)	copolymer saponified layer 6 ..." (JP '000 translation, Detailed Description, ¶ 3.)
11f	(b) two intermediate layers each comprising a polyamide;		"[A] polyamide resin layer 5 ... a polyamide resin layer 7 ..." (JP '000 translation, Detailed Description, ¶ 3.)
11g	(c) two outer layers each comprising a polymeric material or blend of polymeric materials; and	"[O]uter sealing layers A ..." ('854 patent, col. 7, ll. 14-15.) "A film sealable on both sides, comprising (1) an ethylene-propylene copolymer for layer A ..." ('854 patent, col. 7, ll. 60-61.)	"[A] sealing resin layer 3 ... a polypropylene resin layer 9 ... the sealing resin 3 is a layer made of ethylene-vinyl acetate copolymer resin (EVA), polyethylene resin (PE) or an ionomer resin ..." (JP '000 translation, Detailed Description, ¶ 3.)
11h	(d) two layers, each comprising an adhesive polymeric material, which adhere each of said intermediate layers to a respective outer layer.	"B contains adhesion-promoting material ..." ('854 patent, col. 3, ll. 34-35.) See Figure 6 illustrating each layer B situated between corresponding outer sealing layer A and layer C.	"[T]he polyolefin-based adhesive resin layers (4 and 8) are a resin that exhibits adhesion to polyamide resin, EVA saponified material or polypropylene resin (PP) and comprise a polyolefin resin such as PP or PE modified with carboxylic acid." (JP '000 translation, Detailed Description, ¶ 3.)

The combination of the '854 patent and the JP '000 publication discloses each and every claim element of claim 11 of the '419 patent. The application resulting in the '854 patent was filed by another at least one year prior to the filing date of the '419 patent. The JP '000 publication was published prior to the filing date of the '419 patent. Therefore, the combination of the '854 patent and the JP '000 publication invalidates claim 11 of the '419 patent under 35 U.S.C. § 103.

F. Claim 11 of the '419 patent is rendered obvious by the combination of U.S. Patent No. 4,361,628 and U.S. Patent No. 4,511,610.

U.S. Patent No. 4,361,628 ("the '628 patent") issued on November 30, 1982. The '628 patent was not cited during the prosecution of the application resulting in the issuance of the '419 patent. U.S. Patent No. 4,511,610 ("the '610 patent") was filed by Yazaki et al. on September

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29, 1983 and issued on April 16, 1985. The '610 patent was not cited during the prosecution of the application resulting in the issuance of the '419 patent. The '628 patent states "where two layers are identical, one extruder may handle two identical layers." ('628 patent, col. 2, ll. 62-63.) The '610 patent states "an extruder having a diameter of 40 mm, an effective length of 880 mm and two melt channels (for the adhesive layers), and an extruder having a diameter of 65 mm, an effective length of 1430 mm and two melt channels (for the inner and outer layers) ..." ('610 patent, col. 9, ll. 16-20.) Since the '628 patent states that one extruder may handle two identical layers and the '610 patent states the use of such set up with extruders each having two melt channels to form identical adhesive layers and identical inner and outer layers, a person of ordinary skill in the art would have been motivated to replace the single melt channels of the '628 patent with two melt channels for the adhesive layers and the outers layers disclosed in the '610 patent. The combination of the '628 patent and the '610 patent discloses each and every claim element of claim 11 of the '419 patent as shown by the following claim chart:

Claim Elements of Claim 11		Disclosure of the '628 Patent	Disclosure of the '610 Patent
11a	11. An oriented		"In order to reduce the thickness of the vessel wall as much as possible, improve the rigidity, impact resistance and other mechanical properties of the vessel wall and also improve the transparency and gas barrier property, it is preferred that this multi-layer plastic material be molecularly oriented in at least one direction." ('610 patent, col. 1, ll. 24-29.)
11b	coextruded film	"This invention pertains to coextruded plastic films." ('628 patent, col. 1, l. 6.)	"According to the present invention, a parison or sheet having the above-mentioned multi-layer structure is formed by co-melt extrusion ..." ('610 patent, col. 7, ll. 31-33.)
11c	having at least seven layers		"Seven-layer structures of (B)/(B+A+C)/(C)/(A)/(C)/(B+A+C)/(B) and (B)/(B')/(C)/(A)/(C)/(B')/(B)." ('610 patent, col. 7, ll. 23-25.)
11d	arranged		"Seven-layer structures of

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Claim Elements of Claim 11		Disclosure of the '628 Patent	Disclosure of the '610 Patent
	symmetrically comprising:		(B)/(B+A+C)/(C)/(A)/(C)/(B+A+C)/(B) and (B)/(B')/(C)/(A)/(C)/(B')/(B)." ('610 patent, col. 7, ll. 23-25.)
11e	(a) a core layer comprising an ethylene vinyl alcohol copolymer;	"Layer 118 is a high gas barrier material such as EVOH." ('628 patent, col. 3, ll. 15-16.)	"[O]xygen-barrier layer (A) ..." ('610 patent, col. 7, l. 13.) "In view of the oxygen-barrier property, a copolymer obtained by saponifying an ethylene/vinyl acetate copolymer ... is preferably used as the characteristic properties of the ethylene/vinyl alcohol copolymer in the multi-layer vessel of the present invention." ('610 patent, col. 7, ll. 1-7.)
11f	(b) two intermediate layers each comprising a polyamide;	"Layer[] ... 116 ha[s] the same composition[], and serve[s] the same function[] as layer[] ... 16." ('628 patent, col. 3, ll. 13-15.) "Layer 16 is a polymer, copolymer, or blend thereof selected from the nylon family of polyamides." ('628 patent, col. 1, ll. 67-68.) "Layer 120 is a layer of nylon, and may be any nylon which may be coextruded with the gas barrier material." ('628 patent, col. 3, ll. 16-18.)	
11g	(c) two outer layers each comprising a polymeric material or blend of polymeric materials; and	"Layer[] 112 ... ha[s] the same composition[], and serve[s] the same function[] as layer[] 12 ..." ('628 patent, col. 3, ll. 13-14.) "Layer 12 may be a polypropylene homopolymer, a propylene ethylene copolymer, or a blend of polypropylene and polyethylene." ('628 patent, col. 1, ll. 56-58.)	"[T]he olefin resin layer (B)." ('610 patent, col. 7, ll. 14.)
11h	(d) two layers, each comprising an adhesive polymeric material, which adhere each of said intermediate layers to a respective outer layer.	"Layer[] 114 ... ha[s] the same composition [], and serve[s] the same function[] as layer[] 14 ..." ('628 patent, col. 3, ll. 13-14.) "Layer 14 serves as a coextruded adhesive layer between layers 12 and 16." ('628 patent, col. 2, ll. 17-18.)	"[T]he adhesive layer (C)." ('610 patent, col. 7, ll. 12.)

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The combination of the '628 patent and the '610 patent discloses each and every claim element of claim 11 of the '419 patent. The '628 patent issued at least one year prior to the filing date of the '419 patent. The application resulting in the '610 patent was filed by another at least one year prior to the filing date of the '419 patent. Therefore, the combination of the '628 patent and the '610 patent invalidates claim 11 of the '419 patent under 35 U.S.C. § 103.

G. Claim 11 of the '419 patent is rendered obvious by the combination of U.S. Patent No. 4,361,628 U.S. Patent No. 4,572,854.

U.S. Patent No. 4,361,628 ("the '628 patent") issued on November 30, 1982. The '628 patent was not cited during the prosecution of the application resulting in the issuance of the '419 patent. U.S. Patent No. 4,572,854 ("the '854 patent") was filed by Dallmann et al. on February 22, 1984 and issued on February 25, 1986. The '854 patent was not cited during the prosecution of the application resulting in the issuance of the '419 patent. The '628 patent states "where two layers are identical, one extruder may handle two identical layers." ('628 patent, col. 2, ll. 62-63.) The '854 patent states "[t]he production of a seven-layer film is approximately carried out with the use of a three-layer die." ('854 patent, col. 7, ll. 10-11.) Since the '628 patent states that one extruder may handle two identical layers and the '854 patent states the use of a die to form identical adhesive layers and identical outer layers, a person of ordinary skill in the art would have been motivated to modify the die of the '628 patent to form two identical adhesive layers and two identical outer layers as disclosed in the '854 patent. The combination of the '628 patent and the '854 patent discloses each and every claim element of claim 11 of the '419 patent as shown by the following claim chart:

Claim Elements of Claim 11		Disclosure of the '628 Patent	Disclosure of the '854 Patent
11a	11. An oriented		"The film according to the present invention produced by ... stretching, at least biaxially ..." ('854 patent, col. 6, ll. 48-51.)

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Claim Elements of Claim 11		Disclosure of the '628 Patent	Disclosure of the '854 Patent
11b	coextruded film	"This invention pertains to coextruded plastic films." ('628 patent, col. 1, l. 6.)	"The film according to the present invention produced by coextruding layers B,C,D,C(B optional), or A,B,C,D,C,(B and A optional) ..." ('854 patent, col. 6, ll. 48-50.)
11c	having at least seven layers		"The production of a seven-layer film ..." ('854 patent, col. 7, l. 10.)
11d	arranged symmetrically comprising:		"The production of a seven-layer film is appropriately carried out with the use of a three-layer die. In the case of a symmetric film structure, the melts of the polymers for layers B,C, and D may be extruded through the center channel and the melts for the outer sealing layers A simultaneously through the outer channels onto a chill roll." ('854 patent, col. 7, ll. 10-16.) See also Figure 6 illustrating seven layers arranged symmetrically.
11e	(a) a core layer comprising an ethylene vinyl alcohol copolymer;	"Layer 118 is a high gas barrier material such as EVOH." ('628 patent, col. 3, ll. 15-16.)	"The barrier layer D serves as a gas barrier, in particular an oxygen or aroma barrier, and is comprised of an ethylene-vinyl alcohol copolymer ..." ('854 patent, col. 3, ll. 65-67.)
11f	(b) two intermediate layers each comprising a polyamide;	"Layer[] ... 116 ha[s] the same composition[],and serve[s] the same function[] as layer[] ... 16." ('628 patent, col. 3, ll. 13-15.) "Layer 16 is a polymer, copolymer, or blend thereof selected from the nylon family of polyamides." ('628 patent, col. 1, ll. 67-68.) "Layer 120 is a layer of nylon, and may be any nylon which may be coextruded with the gas barrier material." ('628 patent, col. 3, ll. 16-18.)	
11g	(c) two outer layers each comprising a polymeric material or blend of polymeric materials; and	"Layer[] 112 ... ha[s] the same composition[], and serve[s] the same function[] as layer[] 12 ..." ('628 patent, col. 3, ll. 13-14.) "Layer 12 may be a polypropylene homopolymer, a propylene ethylene copolymer, or a blend of polypropylene and polyethylene."	"[O]uter sealing layers A ..." ('854 patent, col. 7, ll. 14-15.) "A film sealable on both sides, comprising (1) an ethylene-propylene copolymer for layer A ..." ('854 patent, col. 7, ll. 60-61.)

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Claim Elements of Claim 11		Disclosure of the '628 Patent	Disclosure of the '854 Patent
		(‘628 patent, col. 1, ll. 56-58.)	
11h	(d) two layers, each comprising an adhesive polymeric material, which adhere each of said intermediate layers to a respective outer layer.	“Layer[] 114 ... ha[s] the same composition [], and serve[s] the same function[] as layer[] 14 ...” (‘628 patent, col. 3, ll. 13-14.) “Layer 14 serves as a coextruded adhesive layer between layers 12 and 16.” (‘628 patent, col. 2, ll. 17-18.)	“B contains adhesion-promoting material ...” (‘854 patent, col. 3, ll. 34-35.) See Figure 6 illustrating each layer B situated between corresponding outer sealing layer A and layer C.

The combination of the ‘628 patent and the ‘854 patent discloses each and every claim element of claim 11 of the ‘419 patent. The ‘628 patent issued at least one year prior to the filing date of the ‘419 patent. The application resulting in the ‘854 patent was filed by another at least one year prior to the filing date of the ‘419 patent. Therefore, the combination of the ‘628 patent and the ‘854 patent invalidates claim 11 of the ‘419 patent under 35 U.S.C. § 103.

H. Claim 11 of the ‘419 patent is rendered obvious by the combination of U.S. Patent No. 4,640,852 and U.S. Patent No. 4,608,286.

U.S. Patent No. 4,640,852 (“the ‘852 patent”) was filed on November 28, 1984 by Ossian and issued on February 3, 1987. The ‘852 patent was not cited during the prosecution of the application resulting in the issuance of the ‘419 patent. U.S. Patent No. 4,608,286 (“the ‘286 patent”) was filed on January 22, 1985 by Motoishi et al. and issued on August 26, 1986. The ‘286 patent was not cited during the prosecution of the application resulting in the issuance of the ‘419 patent. The ‘852 patent states “[i]t is a further object to provide a multiple layer non-foil sheet structure suitable for making retortable pouches, the sheet structure containing nylon and EVOH layers and wherein the nylon and EVOH retain their toughness and flexibility” (‘852 patent, col. 3, ll. 40-44.) The ‘286 patent states “[i]n a laminate having a constitution using an EVOH as an intermediate layer, the improvement of the flexing endurance is noticeable only when the linear low-density polyethylene is used as both surface layers.” (‘286 patent, col. 3, ll. 59-62.) Since the ‘286 patent states the use of linear low-density polyethylene (LLDPE) as both

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surface layers improves the flexing endurance, a person of ordinary skill in the art would have been motivated to use LLDPE as both surface layers where flexing endurance was desired. With the '852 patent stating an object of the invention is to retain toughness and flexibility, it would have been obvious to a person of ordinary skill in the art to add a layer of LLDPE and a corresponding adhesive layer, opposite the layer of LLDPE and corresponding adhesive layer of the film structure of the '852 patent so that both surface layers use LLDPE as disclosed in the '286 patent. The combination of the '852 patent and the '286 patent discloses each and every claim element of claim 11 of the '419 patent as shown by the following claim chart:

Claim Elements of Claim 11		Disclosure of the '852 Patent	Disclosure of the '286 Patent
11a	11. An oriented	"At least the recited first through third layers are molecularly oriented." ('852 patent, col. 4, ll. 10-11.)	
11b	coextruded film	"Layer 320 is the sealing layer, which is preferably [sic] susceptible of coextrusion with the rest of the structure." ('852 patent, col. 5, ll. 2-4.)	"Using a 3-materials 7-layers multilayer diehead ..." ('286 patent, col. 9, l. 67.)
11c	having at least seven layers		"Using a 3-materials 7-layers multilayer diehead ..." ('286 patent, col. 9, l. 67.)
11d	arranged symmetrically comprising:		"Using a 3-materials 7-layers multilayer diehead, a multilayer film having a constitution of D/Ad/E/Ad/F/Ad/G. Each layer comprised the resin and the thickness described below. Ad: An adhesive resin layer of 5 μ in thickness ... D,G: An LLDPE layer of 38 μ in thickness ... E,F: An EVOH resin layer of 6 μ in thickness ..." ('286 patent, col. 9, l. 67 - col. 10, l. 13.)
11e	(a) a core layer comprising an ethylene vinyl alcohol copolymer;	"Layer 314 is EVOH." ('852 patent, col. 5, l. 2.)	"E,F: An EVOH resin layer." ('286 patent, col. 10, l. 13.)
11f	(b) two intermediate layers each comprising	"Layers 312 and 316 are nylon." ('852 patent, col. 5, ll. 1-2.)	

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Claim Elements of Claim 11		Disclosure of the '852 Patent	Disclosure of the '286 Patent
	a polyamide;		
11g	(c) two outer layers each comprising a polymeric material or blend of polymeric materials; and	"Layer 320 is the sealing layer ..." ('852 patent, col. 5, ll. 2-3.) "Layer 20, as at 320 in FIG. 3, is preferably [sic] a heat sealable polymer. ... Another preferred composition for layer 20 includes linear low density polyethylene." ('852 patent, col. 6, ll. 31-37.)	"D,G: An LLDPE layer." ('286 patent, col. 10, l. 8.)
11h	(d) two layers, each comprising an adhesive polymeric material, which adhere each of said intermediate layers to a respective outer layer.	"Layer 318 is an adhesive which is effective to join layers 316 and 320 with good interfacial adhesion." ('852 patent, col. 5, ll. 4-6.)	"Ad: An adhesive resin layer." ('286 patent, col. 10, l. 3.)

The combination of the '852 patent and the '286 patent discloses each and every claim element of claim 11 of the '419 patent. The '852 patent was filed by another at least one year prior to the filing date of the '419 patent. The '286 patent was filed by another at least one year prior to the filing date of the '419 patent . Therefore, the combination of the '852 patent and the '286 patent invalidates claim 11 of the '419 patent under 35 U.S.C. § 103.

I. Claim 11 of the '419 patent is rendered obvious by the combination of U.S. Patent No. 4,640,852 and U.S. Patent No. 5,005,355.

U.S. Patent No. 4,640,852 ("the '852 patent") was filed by Ossian on November 28, 1984 and issued on February 3, 1987. The '852 patent was not cited during the prosecution of the application resulting in the issuance of the '419 patent. U.S. Patent No. 5,005,355 ("the '355 patent") was filed by DeAntonis et al. on October 7, 1988. The application resulting in the issuance of the '355 patent is a continuation of serial no. 727,205, filed on April 29, 1985, which is a continuation of serial no. 518,983, filed on August 1, 1983. The '355 patent was not cited during the prosecution of the application resulting in the issuance of the '419 patent. The '852 patent states "[i]t is important that all the layers of the film retain their oriented shape and form after retort processing." ('852 patent, col. 6, ll. 10-11.) The '355 patent states "[s]tructures

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which are particularly preferred are balanced or symmetrical structures to prevent curling of the film." ('355 patent, col. 2, ll. 19-21.) Since the '355 patent states that symmetrical structures prevent curling of the film, a person of ordinary skill in the art would have been motivated to use a symmetrical structure where the prevention of curling of the film was desired. With the '852 patent stating the importance of all the layers of the film retain their oriented shape and form, it would have been obvious to a person of ordinary skill in the art to add a layer of LLDPE and a corresponding adhesive layer, opposite the layer of LLDPE and corresponding adhesive layer of the film structure of the '852 patent to form a symmetrical structure that is able to prevent curling of the film as disclosed by the '355 patent. The combination of the '852 patent and the '355 patent discloses each and every claim element of claim 11 of the '419 patent as shown by the following claim chart:

Claim Elements of Claim 11		Disclosure of the '852 Patent	Disclosure of the '355 Patent
11a	11. An oriented	"At least the recited first through third layers are molecularly oriented." ('852 patent, col. 4, ll. 10-11.)	"Preferably the film laminate is oriented to a draw ratio of from 1.5:1 to 4:1 in at least one direction. Preferred orientations include monoaxially oriented film laminates and biaxially oriented film laminates." ('355 patent, col. 4, ll. 10-14.)
11b	coextruded film	"Layer 320 is the sealing layer, which is preferably [sic] susceptible of coextrusion with the rest of the structure." ('852 patent, col. 5, ll. 2-4.)	"The preferred film laminate is formed by coextrusion." ('355 patent, col. 2, ll. 13-14.)
11c	having at least seven layers		"In addition to having at least one layer of polyamide adjacent to at least one layer of ethylene vinyl alcohol copolymer the film laminate of the present invention can include laminates and other polymeric film layers. Included in the other polymer film layers are polyolefins and polyolefin copolymers including ionic copolymers. Adhesive layers include modified polyolefins." ('355

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Claim Elements of Claim 11		Disclosure of the '852 Patent	Disclosure of the '355 Patent
11d	arranged symmetrically comprising:		patent, col. 3, ll. 46-51.) “Structures which are particularly preferred are balanced or symmetrical structures to prevent curling of the film.” ('355 patent, col. 2, ll. 19-21.)
11e	(a) a core layer comprising an ethylene vinyl alcohol copolymer;	“Layer 314 is EVOH.” ('852 patent, col. 5, l. 2.)	“Such structures include at least one core layer of ethylene vinyl alcohol copolymer sandwiched between outer layers of polyamide.” ('355 patent, col. 2, ll. 21-23.)
11f	(b) two intermediate layers each comprising a polyamide;	“Layers 312 and 316 are nylon.” ('852 patent, col. 5, ll. 1-2.)	“Such structures include at least one core layer of ethylene vinyl alcohol copolymer sandwiched between outer layers of polyamide.” ('355 patent, col. 2, ll. 21-23.)
11g	(c) two outer layers each comprising a polymeric material or blend of polymeric materials; and	“Layer 320 is the sealing layer ...” ('852 patent, col. 5, ll. 2-3.) “Layer 20, as at 320 in FIG. 3, is preferably [sic] a heat sealable polymer. ... Another preferred composition for layer 20 includes linear low density polyethylene.” ('852 patent, col. 6, ll. 31-37.)	“In addition to having at least one layer of polyamide adjacent to at least one layer of ethylene vinyl alcohol copolymer the film laminate of the present invention can include laminates and other polymeric film layers. Included in the other polymer film layers are polyolefins and polyolefin copolymers including ionic copolymers.” ('355 patent, col. 3, ll. 46-52.)
11h	(d) two layers, each comprising an adhesive polymeric material, which adhere each of said intermediate layers to a respective outer layer.	“Layer 318 is an adhesive which is effective to join layers 316 and 320 with good interfacial adhesion.” ('852 patent, col. 5, ll. 4-6.)	“In addition to having at least one layer of polyamide adjacent to at least one layer of ethylene vinyl alcohol copolymer the film laminate of the present invention can include laminates and other polymeric film layers. Included in the other polymer film layers are polyolefins and polyolefin copolymers including ionic copolymers. Adhesive layers include modified polyolefins. Non-limiting examples of other polymeric layers and adhesives which can be used in the film laminate of the present invention are disclosed in U.S. Pat. Nos. 4,058,647 and 4,254,169 both hereby incorporated by reference.” ('355 patent, col. 3, ll. 46-57.)
			U.S. Patent No. 4,058,647 (“the ‘647

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Claim Elements of Claim 11	Disclosure of the '852 Patent	Disclosure of the '355 Patent
		patent") states "it has been proposed to form a laminated sheet with a polyester, a polyamide, a hydrolyzed EVA, etc. ... It has been proposed to provide an adhesive composition layer between the layers of said resins." ('647 Patent, col. 1, ll. 33-45.)

The combination of the '852 patent and the '355 patent discloses each and every claim element of claim 11 of the '419 patent. The '852 patent was filed by another at least one year prior to the filing date of the '419 patent. The application for which the '355 patent claims priority was filed by another at least one year prior to the filing date of the '419 patent. Therefore, the combination of the '852 patent and the '355 patent invalidates claim 11 of the '419 patent under 35 U.S.C. § 103.

J. Claim 11 of the '419 patent is rendered obvious by the combination of U.S. Patent No. 4,640,852 and the Hessenbruch article.

U.S. Patent No. 4,640,852 ("the '852 patent") was filed by Ossian on November 28, 1984 and issued on February 3, 1987. The '852 patent was not cited during the prosecution of the application resulting in the issuance of the '419 patent. The article entitled "Recent Development in Blown Film Coextrusion" by Rolf Hessenbruch ("the Hessenbruch article") was presented at the 1984 Polymers, Laminations and Coatings Conference on September 24-26, 1984. The Hessenbruch article was not cited during the prosecution of the application resulting in the issuance of the '419 patent. The '852 patent states "[i]t is important that all the layers of the film retain their oriented shape and form after retort processing." ('852 patent, col. 6, ll. 10-11.) The Hessenbruch article states "no curling due to symmetrical construction." (Hessenbruch article, p. 86.) Since the Hessenbruch article states curling can be prevented with a symmetrical construction, a person of ordinary skill in the art would have been motivated to use a symmetrical construction where the prevention of curling was desired. With the '852 patent

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stating the importance of all the layers of the film retain their oriented shape and form, it would have been obvious to a person of ordinary skill in the art to add a layer of LLDPE and a corresponding adhesive layer, opposite the layer of LLDPE and corresponding adhesive layer of the film structure of the '852 patent to form a symmetrical structure that is able to prevent curling of the film as disclosed by the Hessenbruch article. The combination of the '852 patent and the Hessenbruch article discloses each and every claim element of claim 11 of the '419 patent as shown by the following claim chart:

Claim Elements of Claim 11		Disclosure of the '852 Patent	Disclosure of the Hessenbruch Article
11a	11. An oriented coextruded film	"At least the recited first through third layers are molecularly oriented." ('852 patent, col. 4, ll. 10-11.)	"Blowing proportion." (Hessenbruch article, p. 92, Table 4.)
11b		"Layer 320 is the sealing layer, which is preferably [sic] susceptible of coextrusion with the rest of the structure." ('852 patent, col. 5, ll. 2-4.)	"Today the technology of coextrusion enables the production of high sophisticated films in one step by utilizing the best properties of the raw materials in a multi-layer film." (Hessenbruch article, p. 85.)
11c	having at least seven layers		"Summarizing the main features of a modern coextrusion blown film line, the significant items are ... Availability of dies with 2, 3, 4, 5 or 7 layers." (Hessenbruch article, p. 87.)
11d	arranged symmetrically comprising:		"[N]o curling due to symmetric construction." (Hessenbruch article, p. 86.)
11e	(a) a core layer comprising an ethylene vinyl alcohol copolymer;	"Layer 314 is EVOH." ('852 patent, col. 5, l. 2.)	"EVOH has excellent gas barrier properties (about 30-50 times better than nylon). As this material is hygroscopic, the use as centre layer is recommended." (Hessenbruch article, p. 88.)
11f	(b) two intermediate layers each comprising a polyamide;	"Layers 312 and 316 are nylon." ('852 patent, col. 5, ll. 1-2.)	"EVOH has insufficient mechanical properties, which must be compensated by combining it with materials with high mechanical strength." (Hessenbruch article, p. 88.) "It has to be mentioned that

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Claim Elements of Claim 11		Disclosure of the '852 Patent	Disclosure of the Hessenbruch Article
			the mechanical strength of nylon film is higher, and only partly compensated by the thicker LDPE layer in the EVOH combination.” (Hessenbruch article, p. 89.)
11g	(c) two outer layers each comprising a polymeric material or blend of polymeric materials; and	“Layer 320 is the sealing layer ...” ('852 patent, col. 5, ll. 2-3.) “Layer 20, as at 320 in FIG. 3, is preferably [sic] a heat sealable polymer. ... Another preferred composition for layer 20 includes linear low density polyethylene.” ('852 patent, col. 6, ll. 31-37.)	“These materials are divided in Supporting materials[,] bonding materials and barrier materials. The <u>supporting materials</u> and their characteristics[:] LDPE is still the most common material, because it is transparent, easily processable, sealable, humidity resistant and not too expensive.” (Hessenbruch article, p. 87.)
11h	(d) two layers, each comprising an adhesive polymeric material, which adhere each of said intermediate layers to a respective outer layer.	“Layer 318 is an adhesive which is effective to join layers 316 and 320 with good interfacial adhesion.” ('852 patent, col. 5, ll. 4-6.)	“Ionomers were the first bonding materials in connection with nylon and LDPE.” (Hessenbruch article, p. 87.)

The combination of the '852 patent and the Hessenbruch article discloses each and every claim element of claim 11 of the '419 patent. The '852 patent was filed by another at least one year prior to the filing date of the '419 patent. The Hessenbruch article was published at least one year prior to the filing date of the '419 patent. Therefore, the combination of the '852 patent and the Hessenbruch article invalidates claim 11 of the '419 patent under 35 U.S.C. § 103.

K. Claim 11 of the '419 patent is rendered obvious by the combination of the Fant film sample and the Blackwell article.

During the prosecution of the application resulting in the issuance of the '419 patent, the Applicant disclosed in a Supplemental Information Disclosure Statement dated June 12, 1987 (“6/12/87 IDS”) (1) construction of the film sample (“Fant film sample”), disclosed in U.S. serial no. 834,694 to Fant, was invented and known by at least Ennis Fant and (2) the Fant film sample

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was used by at least Ennis Fant, Richard Food and So-Pak-Co in the United States as early as June 1985 (6/12/87 IDS, p. 1):

Applicant, through and by his attorneys, hereby wishes to advise that on or about the first week in June, 1985, unoriented film samples having the construction: 90% LLDPE /LLDPE-based/Nylon 6/EVOH/Nylon 6/LLDPE-base/90% LLDPE 10% Antiblock/Tie Layer / / / / / 10% Antiblock were tested at Richard Food (New York) and So-Pak-Co (South Carolina) for use in vertical form/fill/seal machinery as pouch material.

The film was unoriented, and is the subject matter of USSN 834,694 filed February 28, 1986. The applicant is Ennis Fant.

The article entitled "Ethylene Vinyl Alcohol Resins as a Barrier Material in Multi-Layer Packages" by A. L. Blackwell ("the Blackwell article") was published in Journal of Plastic Film & Sheeting, Vol. 1 on July 1985. The Blackwell article is based on a talk presented at the SPI National Plastics Exposition Conference in Chicago on July 18, 1985. The Blackwell article was not cited during the prosecution of the application resulting in the issuance of the '419 patent. The Blackwell article states "[a]s is typical of other oriented films, the biaxially oriented EVOH film has much better barrier properties over the full range of humidities." (Blackwell article, p. 209.) Since the Blackwell article discloses that the barrier properties of the film can be improved by orientating the film, a person of ordinary skill in the art would be motivated to orientate the film where improving the barrier properties are desired. With the Fant film sample having a core layer of EVOH, likely for its high barrier property, it would have been obvious to person of ordinary skill in the art to orientate the Fant film sample to further improve the barrier property of the film. The combination of the Fant film sample and the disclosure of the Blackwell article teaches each and every claim element of claim 11 of the '419 patent as shown by the following claim chart:

Claim Elements of Claim 11		Fant Film Sample	Disclosure of the Blackwell Article
11a	11. An oriented		"Coextrusion and orientation have combined with these high barrier

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Claim Elements of Claim 11		Fant Film Sample	Disclosure of the Blackwell Article
			resins to make many new markets available to plastics packaging." (Blackwell article, ABSTRACT, p. 205.) "As is typical of other oriented films, the biaxially oriented EVOH film has much better barrier properties over the full range of humidities." (Blackwell article, PROPERTIES OF EVOH COPOLYMERS, p. 209.)
11b	coextruded film		"Coextrusion and orientation have combined with these high barrier resins to make many new markets available to plastics packaging." (Blackwell article, ABSTRACT, p. 205.) "EVOH resins, available in pellet form, are processed by coextrusion into multilayer film ..." (Blackwell article, FABRICATED PRODUCTS, p. 209.)
11c	having at least seven layers	90% LLDPE 10% Antiblock/LLDPE-based Tie Layer/Nylon 6/EVOH/Nylon 6/LLDPE-based Tie Layer/90% LLDPE 10% Antiblock. (6/12/87 IDS.)	"Although the most popular structure is five layers thick, there are some 6 and 7 layer structures." (Blackwell article, FABRICATED PRODUCTS, p. 210.)
11d	arranged symmetrically comprising:	90% LLDPE 10% Antiblock/LLDPE-based Tie Layer/Nylon 6/EVOH/Nylon 6/LLDPE-based Tie Layer/90% LLDPE 10% Antiblock. (6/12/87 IDS.)	"In balanced structures, there are two equal thicknesses of adhesive layers and two equal thicknesses of the primary resin layers." (Blackwell article, FABRICATED PRODUCTS, p. 211.)
11e	(a) a core layer comprising an ethylene vinyl alcohol copolymer;	90% LLDPE 10% Antiblock/LLDPE-based Tie Layer/Nylon 6/EVOH/Nylon 6/LLDPE-based Tie Layer/90% LLDPE 10% Antiblock. (6/12/87 IDS.)	"Because of the moisture sensitivity of the EVOH resins, they are usually placed in the interior of the multilayer composite structure so that adequate moisture protection is achieved." (Blackwell article, FABRICATED PRODUCTS, p. 209.)
11f	(b) two intermediate layers each comprising a polyamide;	90% LLDPE 10% Antiblock/LLDPE-based Tie Layer/Nylon 6/EVOH/Nylon 6/LLDPE-based Tie Layer/90% LLDPE 10% Antiblock. (6/12/87 IDS.)	"In addition to the EVOH layer, other polymers used include LLDPE, HDLPE, HDPE, PP, OPP, ethylene vinyl acetates (EVA), ionomer resin, acrylates, nylon, polystyrene and polycarbonate. There is generally no need for an

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Claim Elements of Claim 11		Fant Film Sample	Disclosure of the Blackwell Article
			adhesive layer when nylon is coextruded with EVOH resins ..." (Blackwell article, FABRICATED PRODUCTS, p. 210.)
11g	(c) two outer layers each comprising a polymeric material or blend of polymeric materials; and	90% LLDPE 10% Antiblock/LLDPE-based Tie Layer/Nylon 6/EVOH/Nylon 6/LLDPE-based Tie Layer/90% LLDPE 10% Antiblock. (6/12/87 IDS.)	"Typically, the EVOH layer is coextruded between layers of high moisture barrier materials such as PE and polypropylene (PP)." (Blackwell article, FABRICATED PRODUCTS, p. 209.)
11h	(d) two layers, each comprising an adhesive polymeric material, which adhere each of said intermediate layers to a respective outer layer.	90% LLDPE 10% Antiblock/LLDPE-based Tie Layer/Nylon 6/EVOH/Nylon 6/LLDPE-based Tie Layer/90% LLDPE 10% Antiblock. (6/12/87 IDS.)	"Since the highly polar EVOH resins do not adhere well to non-polar polyolefins, an adhesive layer must be used between these two polymers." (Blackwell article, FABRICATED PRODUCTS, p. 210.)

The combination of the Fant film sample and the disclosure of the Blackwell article teaches each and every claim element of claim 11 of the '419 patent. The Fant film sample was invented, known and used by others in this country prior to the filing date of the '419 patent. The Blackwell article was published prior to the filing date of the '419 patent. Therefore, the combination of the Fant film sample and the Hessenbruch article invalidates claim 11 of the '419 patent under 35 U.S.C. § 103.

L. Claim 11 of the '419 patent is rendered obvious by the combination of the Fant film sample and the U.S. Patent No. 610.

During the prosecution of the application resulting in the issuance of the '419 patent, the Applicant disclosed in a Supplemental Information Disclosure Statement dated June 12, 1987 ("6/12/87 IDS") (1) construction of the film sample ("Fant film sample"), disclosed in U.S. serial no. 834,694 to Fant, was invented and known by at least Ennis Fant and (2) the Fant film sample was used by at least Ennis Fant, Richard Food and So-Pak-Co in the United States as early as June 1985 (6/12/87 IDS, p. 1):

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Applicant, through and by his attorneys, hereby wishes to advise that on or about the first week in June, 1985, unoriented film samples having the construction: 90% LLDPE /LLDPE-based/Nylon 6/EVOH/Nylon 6/LLDPE-base/90% LLDPE 10% Antiblock/Tie Layer / . / . / . / 10% Antiblock were tested at Richard Food (New York) and So-Pak-Co (South Carolina) for use in vertical form/fill/seal machinery as pouch material.

The film was unoriented, and is the subject matter of USSN 834,694 filed February 28, 1986. The applicant is Ennis Fant.

U.S. Patent No. 4,511,610 ("the '610 patent") was filed by Yazaki et al. on September 29, 1983 and issued on April 16, 1985. The '610 patent was not cited during the prosecution of the application resulting in the issuance of the '419 patent. The '610 patent states "[i]n order to reduce the thickness of the vessel wall as much as possible, improve the rigidity, impact resistance and other mechanical properties of the vessel wall and also improve the transparency and gas barrier property, it is preferred that this multi-layer plastic material be molecularly oriented in at least one direction." ('610 patent, col. 1, ll. 24-29.) Since the '610 patent discloses that the rigidity, mechanical strength, transparency and gas barrier property of the film can be improved by orientating the film, a person of ordinary skill in the art would have been motivated to orientate a film where rigidity, mechanical strength, transparency, or gas barrier property was desirable. With the Fant film sample having a core layer of EVOH, likely for its high barrier property, it would have been obvious to a person of ordinary skill in art would to orientate the Fant film sample to improve the barrier property of the film. The combination of the Fant film sample and the disclosure of the '610 patent teaches each and every claim element of claim 11 of the '419 patent as shown by the following claim chart:

Claim Elements of Claim 11		Fant Film Sample	Disclosure of the '610 Patent
11a	11. An oriented		"In order to reduce the thickness of the vessel wall as much as possible, improve the rigidity, impact resistance and other mechanical properties of the vessel wall and also improve the transparency and gas barrier property, it

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Claim Elements of Claim 11		Fant Film Sample	Disclosure of the '610 Patent
			is preferred that this multi-layer plastic material be molecularly oriented in at least one direction." ('610 patent, col. 1, ll. 24-29.)
11b	coextruded film		"According to the present invention, a parison or sheet having the above-mentioned multi-layer structure is formed by co-melt extrusion ..." ('610 patent, col. 7, ll. 31-33.)
11c	having at least seven layers	90% LLDPE 10% Antiblock/LLDPE-based Tie Layer/Nylon 6/EVOH/Nylon 6/LLDPE-based Tie Layer/90% LLDPE 10% Antiblock. (6/12/87 IDS.)	"Seven-layer structures of (B)/(B+A+C)/(C)/(A)/(C)/(B+A+C)/(B) and (B)/(B')/(C)/(A)/(C)/(B')/(B)." ('610 patent, col. 7, ll. 23-25.)
11d	arranged symmetrically comprising:	90% LLDPE 10% Antiblock/LLDPE-based Tie Layer/Nylon 6/EVOH/Nylon 6/LLDPE-based Tie Layer/90% LLDPE 10% Antiblock. (6/12/87 IDS.)	"Seven-layer structures of (B)/(B+A+C)/(C)/(A)/(C)/(B+A+C)/(B) and (B)/(B')/(C)/(A)/(C)/(B')/(B)." ('610 patent, col. 7, ll. 23-25.)
11e	(a) a core layer comprising an ethylene vinyl alcohol copolymer;	90% LLDPE 10% Antiblock/LLDPE-based Tie Layer/Nylon 6/EVOH/Nylon 6/LLDPE-based Tie Layer/90% LLDPE 10% Antiblock. (6/12/87 IDS.)	"[O]xygen-barrier layer (A) ..." ('610 patent, col. 7, l. 13.) "In view of the oxygen-barrier property, a copolymer obtained by saponifying an ethylene/vinyl acetate copolymer ... is preferably used as the characteristic properties of the ethylene/vinyl alcohol copolymer in the multi-layer vessel of the present invention." ('610 patent, col. 7, ll. 1-7.)
11f	(b) two intermediate layers each comprising a polyamide;	90% LLDPE 10% Antiblock/LLDPE-based Tie Layer/Nylon 6/EVOH/Nylon 6/LLDPE-based Tie Layer/90% LLDPE 10% Antiblock. (6/12/87 IDS.)	
11g	(c) two outer layers each comprising a polymeric material or blend of polymeric materials; and	90% LLDPE 10% Antiblock/LLDPE-based Tie Layer/Nylon 6/EVOH/Nylon 6/LLDPE-based Tie Layer/90% LLDPE 10% Antiblock. (6/12/87 IDS.)	"[T]he olefin resin layer (B)." ('610 patent, col. 7, ll. 14.)
11h	(d) two layers, each comprising an adhesive polymeric material, which adhere each of said	90% LLDPE 10% Antiblock/LLDPE-based Tie Layer/Nylon 6/EVOH/Nylon 6/LLDPE-based Tie Layer/90% LLDPE 10% Antiblock.	"[T]he adhesive layer (C)." ('610 patent, col. 7, ll. 12.)

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Claim Elements of Claim 11	Fant Film Sample	Disclosure of the '610 Patent
intermediate layers to a respective outer layer.	(6/12/87 IDS.)	

The combination of the Fant film sample and the disclosure of the '610 patent teaches each and every claim element of claim 11 of the '419 patent. The Fant film sample was invented, known and used by others in this country prior to the filing date of the '419 patent. The '610 patent was published prior to the filing date of the '419 patent. Therefore, the combination of the Fant film sample and the '610 patent invalidates claim 11 of the '419 patent under 35 U.S.C. § 103.

III. CLAIM 11 OF THE '419 PATENT IS INVALID UNDER 35 U.S.C. § 112.

- A. Claim 11 of the '419 patent is invalid based on lack of written description under 35 U.S.C. § 112(1).**

To the extent Claim 11 is construed in such a way by the Court that it would read on the Accused Products, Claim 11 is in violation of the written description requirement, 35 U.S.C. § 112(1).

- B. Claim 11 of the '419 patent is invalid based on lack of enablement under 35 U.S.C. § 112(1).**

To the extent Claim 11 is construed in such a way by the Court that it would read on the Accused Products, Claim 11 is in violation of the enablement requirement, 35 U.S.C. § 112(1).

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- C. Claim 11 of the '419 patent is invalid based on indefiniteness under 35 U.S.C. § 112(2).**

To the extent Claim 11 is construed in such a way by the Court that it would read on the Accused Products, Claim 11 is indefinite in violation of 35 U.S.C. § 112(2).

INTERROGATORY NO. 8

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With respect to claim 11 of the '419 patent, state the basis for Pechiney's contentions set forth in its Fourth Affirmative Defense (File Wrapper Estoppel), and identify and fully describe the specific portions of the '419 prosecution history relied on by Pechiney, any other prior art, evidence, documents, or things relating to Pechiney's contentions as set forth in its Fourth Affirmative Defense and the person(s) most knowledgeable about the basis for Pechiney's contentions.

RESPONSE TO INTERROGATORY NO. 8

Pechiney objects to this contention interrogatory on grounds that it is premature. Pechiney has not received any discovery from Cryovac. Pechiney has not received Cryovac's construction of the claim elements of claim 11 of the '419 patent and the Court has not yet resolved any potential claim construction disputes. Subject to and without waiving these objections and the General Objections, the basis for Pechiney's file wrapper estoppel contentions are as follows.

Due to file wrapper estoppel, Cryovac is precluded from proving that products sold under the trademark ClearShield™ infringe claim 11 of the '419 patent through reliance on the doctrine of equivalents. File wrapper estoppel limits the application of the doctrine of equivalents. Two distinct theories of file wrapper history estoppel exist, amendment-based estoppel and argument-based estoppel. Both prevent the patentee from recapturing through equivalence certain coverage given up during prosecution. With respect to amendment-based estoppel, a narrowing amendment made to satisfy any requirement of the Patent Act may give rise to an estoppel. With respect to argument-based estoppel, the file history must evince a clear and unmistakable surrender of the subject matter.

The Federal Circuit has set forth a three part test to determine whether file wrapper estoppel prevents the application of the doctrine of equivalents to an element of an accused device. The first inquiry is whether a claim amendment narrowed the claim's literal scope. The

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second inquiry is whether the reason for the amendment was substantially related to patentability. An amendment is substantially related to patentability if it was made to satisfy any requirement of the Patent Act.

The third inquiry is whether the patentee may rebut the presumption of total surrender of all subject matter between the original and amended claims by demonstrating the patentee did not surrender the particular equivalent in question according to three rebuttal criterion. The first rebuttal criterion is whether the patentee can demonstrate that the alleged equivalent would have been unforeseeable at the time of the narrowing amendment. The second rebuttal criterion is whether the patentee can show that the rationale underlying the narrowing amendment bore no more than a tangential relation to the equivalent in question. A narrowing amendment made to avoid the prior art that contains the alleged equivalent cannot be deemed tangential. The final rebuttal criterion is whether the patentee can establish some other reason suggesting that the patentee could not reasonably be expected to have described the insubstantial substitution in question.

During the prosecution of the application resulting in the '419 patent, in response to the Examiner's rejection based on the Sheptak prior art reference, Cryovac added the terms "having at least seven layers arranged symmetrically" and argued that Sheptak only taught a five layer structure "symmetrically arranged (14) and an overall eight layer structure (S) of the reference is asymmetric." (emphasis original) (Amendment After Final Rejection dated May 22, 1987).

Cryovac continued:

If, as the Examiner has argued, it would be obvious to employ the outer layers of Mueller at the outer layers in Sheptak, one of two structures would result. In the first, the outer layers 15 of the five-layer film 14 of Sheptak would have the blends disclosed in Mueller. The second possibility would be that one of layers 15 (adjacent the porous mass of glass fibers comprising batt 13) and layer 20 would be the 'outer' layers of

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Mueller. In either hypothetical, an oriented coextruded film having at least seven layers arranged symmetrically is not achieved.

Cryovac's amendments are clearly narrowing amendments. These amendments were the basis for which the Examiner did not continue his rejection of the claim based on obviousness and is clearly substantially related to patentability. Pechiney does not believe that Cryovac will be able to meet any of the three exceptions available for Cryovac to rebut the presumption of surrender and it is Cryovac's burden to allege and prove some exception. Furthermore, Cryovac's arguments made to the Examiner in support of patentability likewise create an argument-based estoppel.

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As to the responses to the Interrogatories:

I declare under penalty of perjury under the laws of the United States of America that the foregoing responses to Interrogatory Nos. 1-8 of Cryovac's First Set of Interrogatories to Pechiney are true and complete to the best of my knowledge and belief.

Pechiney Plastic Packaging, Inc.

Dated: March ___, 2005

By: _____

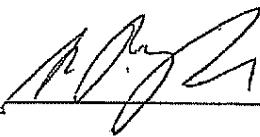
Name:
Title:

As to the objections to the Interrogatories:

Respectfully submitted,

Dated: March 4, 2005

By: _____


One of its Attorneys

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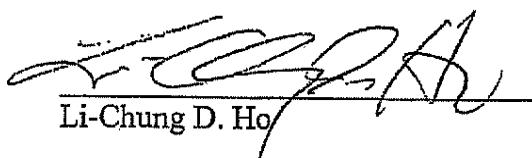
CERTIFICATE OF SERVICE

I, Li-Chung D. Ho, an attorney, hereby certify that I caused true and correct copies of Pechiney Plastic Packaging, Inc.'s Response to Cryovac's First Set of Interrogatories (Nos. 1-8) to Pechiney to be served on:

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This 4th day of March, 2005 by first class mail.



Li-Chung D. Ho